

A Proposal to Study the Socio Economic Impact of Gambling on Iowans

Submitted to

The Studies Committee of the
Iowa Legislative Council

By

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7 September 2004

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A Proposal to Study the Socio Economic Impacts of Gambling in Iowa

This is a proposal to study the socio-economic impacts of gambling in Iowa utilizing the staff and resources of Iowa State University in support of the project. The participants in this study are experts in economic impact assessment and economic and social policy analysis, have conducted and published studies on the family financial impacts of gambling in Iowa, and are accomplished social statisticians. It is being prepared in response to the 22 July 2004 Request for Proposal (RFP) issued by the Studies Committee of the Iowa Legislative Council.

RFP Parts 1 through 3. The local economic effects of gambling community wide, on businesses, and on the job market

The gambling to be analyzed in this project refers primarily to legalized gaming authorized by the State of Iowa. In specific, the state of Iowa allows pari-mutuel dog and horse track betting, and it allows casinos in both riverboats and in its existing dog and horse tracks in the state. The state also runs the Iowa Lottery, which includes a variety of small, medium, and large return options for participants. The RFP specifically and repeatedly refers to casino-type gaming, and it is the expectation of this research team that the bulk of activity analyzed will relate to the State of Iowa's legalized casino and track operations.

Gaming is big business in Iowa: according to a Strategic Economics Group February, 2004, study funded by the Iowa Association of Business and Industry, of which the Iowa gaming industry is a member,¹ Iowa's 13 casinos and gaming facilities generated \$1.024 billion in direct industrial output (the equivalent of sales) employed 8,700 workers, and paid their workers \$195.4 million in wages and salaries.² Gaming has several potential economic effects regionally and statewide:

- At the regional level it may significantly boost employment and total economic activity because it is a recreational and entertainment draw intended to serve a population larger than the host community.

¹ The Iowa Gaming Association is an association of the "ten riverboat casinos and three racetrack casinos from across Iowa. [It] is united in the effort to promote the positive economic impact the gaming industry has on our state by employing thousands of Iowans and by making a commitment to purchase products and commodities manufactured and grown in this state" according to its web site at www.iowagaming.org. Hence, the study listed below.

² Kenneth Stone, Daniel Otto, & Harvey Siegelman. Economic Analysis of the Iowa Casino Gaming Industry: Market Patterns, Economic Impact and the Likely Effects of an Expansion in the Number of Licensees. Iowa Association of Business and Industry Report, 2004.

- The location of a gaming facility in a community inevitably results in significant shifting within a community and within a region as recreational and entertainment dollars are redirected to casino operations.
- At the statewide level, gaming has the ability to attract visitors to the state who otherwise might have been indifferent to visiting it. This is more true of casino and gaming operations on Iowa's borders as their trade areas extend into a neighboring state. From an Iowa economy perspective, these operations attract out-of-state visitor spending that likely might not have occurred. Accordingly, some portion of gaming activity in Iowa creates income and jobs in excess of what the state's population alone would have demanded. In these instances, as gaming is a unique recreational draw, gaming can have a definable economic impact both regionally and statewide.

The macro economic effects of gaming are only one aspect of the industry. As we zero in on communities, gaming also influences household spending patterns in a region, public spending for goods and services, public investment in infrastructure, and it creates both additional revenues and costs for city and county governments. Casinos and gaming also influence the kind and amounts of business activities available in an area, the kind and amounts of jobs available in an area, and, with regard to issues associated with problem gambling, they may influence regional demand for publicly and privately provided social services and health care. Furthermore, gaming may also influence the demographic composition of host communities.

Task 1. This research team will create separate input-output econometric models of all of the Iowa counties that serve as the trade territories of Iowa's gaming and casino operations. In each of those models we will estimate the total regional level economic effects of gaming for each particular region. We will also develop and administer a survey instrument to be completed by the marketing departments of each gaming operation in Iowa to find out residential patterns of those attending their operations, ascertain the average amounts spent by different kinds of attendees, and other pertinent information such as length of stay or frequency of visits. These data will then be used to estimate the local visitor or local economic impact effects of gaming in the region. This analysis will allow for a regional-level description of the value of gaming to a community, and it will parse out how much of that activity counts as regional economic impact – that is, trade accruing to a region that otherwise might not have due to tourism. Complete reports and write-ups of all community, regional, and statewide economic effects will be prepared.

Iowa Racing and Gaming Commission data will be gathered, organized and assessed specifically to differentiate major direct economic aspects of different gaming venues in Iowa. Another important part of this task will be an assessment of the linkages that the gaming industry has with other industries in the state of Iowa. The higher the linkage values that companies have with industries within an economic

region or the state, the greater the value of those firms to the overall economy. The modeling system that we employ already has estimates of the inter-industrial transactions that occur in the gaming, entertainment, and recreation industries in the state. This sector is larger than gaming and includes theme parks and other activities, however. Consequently, this research team will develop and administer a survey instrument for gaming operations managers in the state to ascertain by a reasonably high level of detail the kinds of inputs that they buy and the amounts that they buy from Iowa vendors. The survey data will then be used to manually modify each of our models to determine the value of intra-regional transactions attributable to the gaming industry and the types of industries that indirectly benefit from gaming in the state.

Task 2. This research team will conduct a detailed analysis of the entire economic structure in the areas that host gaming and casino facilities. Gaming and all of its related activities will be placed within the context of the entire community economy and the entire state economy. This analysis will be industry specific to the extent that secondary data allow, and it will assess overall changes in industrial activity over time. There are four main categories of information that will be readily available at the county level – jobs, earnings to workers, the number of firms by kind of retail or service provided, and categorical retail and service sales activity. These analyses over time allow us to use standard comparative statistical techniques, such as shift-share analysis, to explain the kinds of change occurring in the region of study net of all other changes occurring statewide. Economic data from gaming counties will be aggregated in ways that allow for comparisons to similarly-sized aggregates of other communities in the state and to the state as a whole to isolate whether communities that host casinos have had different economic experiences.

Related to this task are the ongoing levels of donations that casinos and gaming establishments make to groups and organizations. The researchers will identify the amounts donated, the type of recipient, and the researchers will estimate scope of assistance and the direct economic values attributable to those donations, as in the number of jobs that are supported by these donations, the expected earnings of those jobs, and the kinds of goods and services that are enabled by casino and gaming donations.

Task 3. This research team will utilize available compilations of detailed local government revenue and expenditure statistics to ascertain the fiscal and public service outcomes in communities that host casinos. There are several very good sources of data for this research, the most reliable of which will be obtained from the U.S. Census's quinquennial Survey of Governments, along with certified property tax data for all counties and communities that are maintained by the Iowa Department of Management. The economic researchers on this project are skilled at fiscal analysis and fiscal impact analysis in light of economic changes in a region. As in Task 2, changes over time will be assessed for our gaming communities in the

aggregate and compared to similarly-sized counties that do not have gaming facilities to identify potential differences in public spending and public receipts.

Related to this step, we will identify the amounts of local government receipts attributable to gaming in the regions of scrutiny and estimate the effect those receipts have on other own source local revenue demands and the distribution of public goods and services in the study area. Shift-share measurement techniques will be employed to determine the extent to which casino and gaming revenues have influenced other dimensions of government revenue activities in the host counties and communities. Shift-share analysis allows us to compare changes in one area or set of areas with those of a larger area. It also allows us to decompose the sources of change.

Task 4. This research team will amass and compile sets of secondary statistics for the state of Iowa that will allow the comparison of the casino and gaming communities with other communities in the state and with the state of Iowa as a whole. Those statistics would include, as examples, county level household income levels, business starts and failures, unemployment, and the characteristics of the unemployed.

Analysis will also be conducted comparing 2000 Census of Population and Housing Statistics with 1990 data to isolate pertinent economic, housing, and social changes in the regions of scrutiny as compared to other similar sized counties in Iowa and the state as a whole. This analysis is very important because it will allow for a detailed assessment of the types, amounts, and the quality of changes occurring to workers, households, and the communities in which they live and work over a period of time when gaming was aggressively added to the Iowa economy.

There are several categories of data of interest to the funders that will be challenging to amass in any reliable or generalizable manner. For example, the distributions of health insurance coverage, benefits, or pension plans in a community are not collected by any agencies that we are aware at the small-area level, nor would statistics at the local level on job absenteeism be available.

Parts 4 through 7: The effects of gambling on problem gamblers, other residents of a community, family life and family structure, and on household finances

A subset of the general population suffers from some form of problem or addictive gambling behavior. By increasing physical access to gaming opportunities, as would be the case with communities that host casinos and gaming activities, there is a supposed increase in the area incidence of problem gambling along a concomitant increase in the need for treatment for gambling addictions. The state of Iowa acknowledges this and requires that gaming proceeds be pooled and made available

to facilities that treat gambling addicts. Problem gambling has several consequences. The problem gambler caught in the throes of addiction makes, over a period of time, increasingly catastrophic personal decisions. These decisions influence that person's ability to function in society and in a household. Problem gamblers also have a profound influence on their families and friends. These influences come in the forms of negative emotional, behavioral, and financial outcomes within households and relationships.

Problem gaming has direct financial and social consequences. Money spent on chronic gambling cannot be spent by the individual or the family elsewhere in the local economy; consequently, the range of goods and services used by households afflicted with a problem gambler decreases as their financial stress increases. Families in financial and emotional distress will inevitably require behavioral, social, protective, or financial assistance. That assistance will come from host communities and counties, nonprofit organizations, and from state programs. Families in distress are also likely to suffer higher rates of verbal and physical abuse, separations and divorce, along with dependence on social services and increased public safety interventions.

Task 1. The research team will amass relevant vital and social statistics for all of the state of Iowa over time to include characteristics of suicide, divorce, foster care placement, domestic abuse, crime and arrest statistics, and statistics associated with school attendance and school drop outs and other potential indicators that might be pertinent. These data will be obtained from the Iowa Department of Public Health, the Department of Justice's UCR data base, the Iowa Department of Education, and from the Iowa Department of Human Services. Data from the 1990 and the 2000 censuses at the county and community levels will be assessed to determine whether family characteristics are different than comparable groups of counties or the rest of the state, especially the incidence and characteristics of single family households. These data will be organized in tabular form and analyzed in a manner to isolate characteristics of communities with gaming and those without to determine if there are meaningful differences.

Task 2. The research team proposes to gather all relevant statistics compiled by the 1-800-BETSOFF system in order to identify the temporal and spatial characteristics of calls for assistance. Data on the number of calls over time by month, and by location, can be compared to the establishment over time of gaming venues in the state of Iowa. To the extent available, we will also differentiate the incidences of calls over time by problem gamblers and calls from concerned persons.

The research team will secure the cooperation of household credit counseling agencies in Iowa to identify, receive, and process as much relevant data as possible maintained by these agencies that will allow for the reliable comparison of demand for credit counseling services in counties with gaming and casino facilities and those

without. The Principle Investigator on this study has been working with and advising state and national leaders in household credit counseling for many years, and is nationally known as an expert and accomplished researcher in household financial issues. Under her direction, managers of these agencies will be systematically interviewed to ascertain their expert-based observations about the characteristics of persons seeking credit counseling assistance and how those characteristics may have changed over time, especially in light of increased exposure to legal gaming opportunities.

Task 3. The research team will administer a questionnaire to medical directors or patient care supervisors of all of the centers in the state of Iowa that treat problem gambling. This questionnaire will be structured to use the respondents' patient care expertise in assessing the extent of the problem to gamblers, their families and their communities, the likelihood and cost of recovery, and any changes in the need for services.

A second questionnaire will be prepared and distributed to members of Gamblers Anonymous. This questionnaire will be used to identify a range of pertinent information about the personal characteristics of problem gamblers actively working an addiction program as well as questions about the social and financial costs of their gambling addiction.

A randomly selected general population sample of adult Iowans will be chosen to participate in a brief telephone interview. The sample will be stratified to include persons living within proximity of a casino and those living further away. Respondents will be asked general opinion and attitude questions about gaming in Iowa and whether they have been affected by problem gambling directly or indirectly. Responses will be statistically weighted to provide an assessment of public awareness and concern. In drafting these questionnaires, we will consult directly with experts in gambling addiction and the study of gambling addiction to isolate the critical variables to measure.

Information on overall incidences of addictive or mental health disorders at the state let along the county levels will vary widely, to the extent that it is available, as also will estimates of persons that are homeless. Similarly, information about business thefts or thefts from friends or families is not collected in any reliable fashion and would have to be gleaned from some types of survey instrument. Reports of this kind are highly likely to be anecdotal in nature. Analysis of crime statistics will allow for an assessment of, for example, of embezzlement and larceny crimes as an indirect measure of potential addiction-related criminal activity, but not necessarily criminal activity associated with gambling addictions.

Much of the information generated in this study will be derived from secondary sources, primarily from government agencies. Those data will be organized in ways

to legitimately compare gaming communities in the aggregate with peer counties and with the state of Iowa. The identification of differences among the groups, however, when using secondary data sources must not be construed to mean causation. In particular, the organization of information at the group level for casino counties compared to non casino counties does not mean that *ipso facto* differences discovered are attributable to the presence of a casino. To assume at the outset that such characterizations are statistically relevant for policy purposes in terms of determining specific outcomes in communities, families, and individuals attributable to gaming is inappropriate from both sound social science measurement and policy analysis perspectives. Differences could also, in these aggregations, be explained by a variety of factors including urbanization, community composition, geographic factors, cultural factors, along with other economic or social activities in the region.

Information derived from properly conducted, randomly drawn samples of particular persons or groups of persons, on the other hand, can be used to infer causation but the scale of those conclusions has to be appropriate to and match the unit of analysis.

Key Study Personnel, Relevant Research Experiences, and Institutional Capacity

Principal Investigator: Tahira Hira is currently serving as Assistant to the President for External Relations and Executive Administration, and she is a professor of consumer economics and personal finance at Iowa State University.

Dr. Hira is known internationally for her research on consumer bankruptcy, including the social and psychological aspects of borrowing and gambling. She has taught and conducted research in family financial management, consumer credit, and consumer bankruptcy in Scotland, Canada, New Zealand, and Japan. She has also served as a consultant for the development of financial counseling and planning programs for the University of Minnesota, the University of Putra (Malaysia), and Zayed Women's University in the United Arab Emirates. She was founding president of the Association for Financial Counseling and Planning Education, and has served the board of the American Association of Family and Consumer Sciences as both president and vice president of Finance & Properties.

Due to existing commitments and responsibilities, Dr. Hira will act as Principal Investigator on this project *pro bono*, but will actively guide and supervise all research related to the family financial consequences of problem gambling.

Co-principal investigator: David Swenson serves as a regional scientist in the Department of Economics and as an adjunct assistant professor in Community and Regional Planning at Iowa State University. He also serves periodically as an

adjunct assistant professor in the graduation program in Urban and Regional Planning at The University of Iowa.

David Swenson is an accomplished regional economics, economic impacts, and fiscal effects analyst. He is one of the state's leading experts in input-output (or economic impact) modeling, and he teaches input-output modeling techniques and procedures at both Iowa State University and The University of Iowa. He will employ the IMPLAN modeling system and data to assess the economic effects of gaming on a regional and statewide basis. He has devised numerous models for analyzing the regional demographic, economic, and fiscal consequences of change for researchers in other states, and he will use that expertise and experience in devising modeling and descriptive systems for analyzing and reporting the social and economic consequences of gaming in Iowa. He has authored or co-authored numerous reports and studies on the Iowa economy as well as refereed articles, and over a twenty-two year period of service to the state of Iowa Mr. Swenson has worked frequently with or testified before several Iowa legislative committees and state agencies.

Mr. Swenson will coordinate the overall economic research portions of this study, he will oversee all of the secondary data analysis, he will be responsible for compiling and reporting study findings, and he will act as primary contact with study sponsors.

Co-principal investigator: Liesl Eathington works as a regional scientist in the Department of Economics at Iowa State University.

Ms. Eathington is an expert in data base management, in the acquisition of social and economic secondary data, and in formatting those data for regional analysis. She is also an expert on geographic information system technology (GIS) and will employ these particular skills in estimating the trade areas of Iowa's gaming venues. She maintain, supervise, and safeguard all project data collections, and she will participate significantly in the compilation of economic and social statistical outcomes in this study.

Co-principal investigator: Dianne Anderson, Assistant Director, Center for Survey Statistics and Methodology, Iowa State University.

Ms. Anderson will coordinate the ISU Center for Survey Statistics and Methodology participation on this study. The Center will be responsible for collaborating with other principal investigators in the survey development of three self-administered survey instruments and three interviewer administered survey instruments. The Center will also be responsible for the printing of all survey instruments, assembling and mailing survey instruments to appropriate groups, conducting telephone follow-up activities for the mail surveys, and conducting the random-digit-dial (RDD) general population survey of adult Iowans using computer-assisted-interviewing

technology (CATI), including the training, supervision and monitoring of all telephone interviews. In addition the Center will receipt, edit, code and provide data entry services for all paper and pencil questionnaires, and will edit, code and prepare the electronically collected data, and will contribute in the preparation of the final report.

Ms. Anderson will also serve as the methodological expert on this study in assuring the application of proper and defensible scientific procedures in our surveys and the objective and substantive accuracy of our findings and the reporting of our findings as they relate to the populations or groups studied.

Project Budget

Basic Economic Research and Project Coordination:			
	Base Values	+ Benefits*	= Total Costs
David Swenson(Co-PI) @ .35 FTE for 8 months =	14,265	4,422	18,687
Liesl Eathington @ .35 FTE for 8 months =	10,462	3,243	13,705
Other economic research wages	6,653		6,653
Salary and benefits	31,380	7,665	39,045
Travel, supplies, & miscellaneous costs	4,000	NA	4,000
Subtotal	35,380	7,665	43,045
Family Economics Research			
Tahira Hira (PI)	In-Kind	NA	NA
Other family economics research wages	12,400		12,500
Subtotal	12,400		12,500
Center for Survey Statistics and Methodology			
Dianne Anderson (Co-PI) @ .15 FTE for 6 months	4,800	1,488	6,288
Other Center wages and salaries	11,324		11,324
Benefits and administration costs	6,574		6,574
Other direct costs			
Telephone	100		100
Supplies, printing, misc.	574		574
Postage	120		120
Computer support	2,275		2,275
Subtotal	3,069		3,069
Subtotal	25,767	1,488	27,255
Total Direct Project Costs	73,547	9,153	82,800
University indirect costs @ 8%			7,200
Total Direct and Indirect Costs			90,000

* The benefit rate for professional and scientific staff is .31.

Project Schedule of Activities

21 September – 31 October 2004

- Identify all secondary data needs and sources.
- Hire assistant research personnel.
- Begin a systematic literature review of the economic impacts and family financial aspects of gambling

- Meet internally to outline the scope of questions to be included in the several research instruments.
- Establish contacts and conduct meetings with subject matter experts to identify potential survey questions and to ascertain the availability of institutional, private, and other relevant data sources pertinent to the project.
- File written progress report (by 13 October 2004).
- Initiate secondary economic, social, and fiscal secondary data collection.

1 November – 31 December

- Acquire ISU human subjects review approval for all survey instruments.
- Finalize all survey research instruments.
- Continue secondary data collection.
- Finalize procedures for administering survey instruments
- Prepare summary of literature on the economic impacts and the family financial aspects of gambling
- Initiate self-administered survey of the financial aspects of gaming venues in Iowa
- Initiate self-administered survey of gaming venue client characteristics
- Progress report meeting (6 December 2004)
- Initiate and distribute remaining self-administered surveys
- Initiate and conduct interviewer administered surveys

1 January 05 – 28 February 05

- Collect, compile, and analyze all financial and gaming client data
- Acquire by 15 January new input output data for all Iowa counties from vendor
- Begin the construction of the input-output accounts for the 13 gaming regions in Iowa
- Collect, compile, and analyze all remaining survey data
- Prepare written progress by 20 January 2005
- Conduct final gaming economic impact assessments
- Organize all information for reporting
- Prepare draft final report of findings
- Submit draft final report 25 February 2005

1 March 05 – 1 July 05

- Respond to all questions and concerns on draft report
- Make presentations as requested
- Submit preliminary final draft for peer review
- Respond to peer review comments
- Submit final report by 1 July 05.

Appendices

Key participant resumes and references:

Dr. Tahira Hira pp 13 – 59

David Swenson pp 60 – 63

Liesl Eathington pp 64 – 65

Dianne Anderson pp 66 – 71

Summaries of examples of relevant research activity of similar scope:

Tahira Hire & Kyra Monson. *A social learning perspective of gambling behavior among college students.* pp 70 – 91

Dave Swenson & Liesl Eathington. *The creative economy in Iowa: Executive summary.* pp 92 – 96

J. D. Opsomer, D. G. Anderson, L. L. Anderson. *Epidemiology and genetics of parkinson's disease control recruitment for the Mayo clinic: Revised final methodology report.* pp 97 – 105

Current Position

- 2002–Present • Assistant to the President for External Relations and Executive Administration, Iowa State University, Ames, Iowa

Education

- 1976 • Ph.D., University of Missouri-Columbia, Family Economics and Management
1973 • M.S., University of Missouri-Columbia, Agricultural Economics
1966 • M.A., Punjab University, Lahore, Pakistan, Economics
1963 • B.A., Punjab University, Lahore, Pakistan, Economics

Positions Held Since Receiving Ph.D.

- 2002–2005 • External Assessor, Universiti Putra Malaysia, Fakulti Ekologi Manusia. KL Malaysia
1998–2002 • Associate Vice Provost, ISU Extension, Iowa State University
1996–1997 • Presidential Intern (Budgets and Strategic Planning), Iowa State University
1990–1991 • Scientist, USDA/CSRS Management of Program Reviews (stationed at Iowa State University)
1990 Spring • Scientist, USDA/CSRS (Cooperative State Research Service) under Intergovernmental Personnel Act (IPA), Washington, D.C.
1988–Present • Professor, Department of Family Environment (current Human Development and Family Studies), Iowa State University
1984–1988 • Associate Professor, Department of Family Environment, Iowa State University
1980–1984 • Assistant Professor, Department of Family Environment, Iowa State University
1976–1980 • Assistant Professor, Department of Family Studies, University of Manitoba, Winnipeg, Manitoba, Canada

Visiting Professor

- 1994 Spring • Department of Consumer and Applied Sciences, University of Otago, Dunedin, New Zealand
1987 Spring • Department of Economics, University of Glasgow, Scotland
1986 Fall • Department of Family Living, Nara Women's University, Nara City, Japan
1981 Summer • Department of Home Economics, Mount Saint Vincent University, Halifax, Nova Scotia, Canada
1979 Summer • Department of Home Economics, University of British Columbia, Vancouver, British Columbia, Canada
1978 Summer • Department of Home Economics, Ryerson Polytechnic Institute, Toronto, Ontario, Canada

Administrative Activities

Publications

Refereed Journals

- 2005 Hira, Tahira K. and Caecilia Loibl (2005). Understanding the Impact of Employer-Provided Financial Education on Employee Commitment. *Journal of Consumer Affairs* (Summer Issue)

- 2004 • Power, L. M. and T. K. Hira. University provided retirement planning support and retiree financial satisfaction during retirement: Differences by gender, job classification and planning behavior. *Journal of Risk Management and Insurance Review*. (in print)
- 2001 • Hira, T. K. People behind money—As they hold it and fold it. *Journal of Practical Estate Planning* 3 (6): 45–62.
- 2000 • Hira, T. K., M. Anderson, and K. Peterson. Students' perceptions of their education debt and its impact on life after graduation. *Journal of Student Financial Aid* 30 (1): 7–19.
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- 2000 • Hira, T. K., and K. W. Monson. A social learning perspective of gambling behavior among college students at Iowa State University, USA. *Journal of Consumer Studies and Home Economics* 24 (1): 1–8.
- 1999 • Hira, T. K., and O. Mugenda. The relationship between self-worth and financial beliefs, behavior, and satisfaction. *Journal of Family and Consumer Sciences* 91 (4): 76–82.
- 1999 • Hira, T. K., and O. Mugenda. Predictors of financial satisfaction: Differences between retirees and non-retirees. *Financial Counseling and Planning* 9 (2): 75–83.
- 1999 • Power, M. L., T. K. Hira, and R. P. Murphy. Personal bankruptcy, a risk management technique: Policy implications. *Risk Management and Insurance Review* 2 (7): 81–102.
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- 1993 • Sumarwan, U., and T. K. Hira. The effects of perceived locus of control and perceived income adequacy on satisfaction with financial status among rural households. *Journal of Family and Economic Issues* 14 (4): 343–64.
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- 1992 • Garrison, M. E., and T. K. Hira. The effect of daily hassles, reported managerial behavior, family adaptability and family cohesion on family health. *Family Perspective* 26 (3): 361–82.
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- 1992 • Hira, T. K., and C. Brinkman. Factors influencing the size of student debt. *Journal of Student Financial Aid* 22 (2): 33–50.
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- 1992 • Hira, T. K., A. M. Fanslow, and R. M. Vogelsang. Determinants of satisfaction with preparation for financial emergencies. *Financial Counseling and Planning Education* 3:43–62.
- 1992 • Wasberg, C. K., T. K. Hira, and A. M. Fanslow. Credit card usage consumer debt burden of households. *Journal of Consumer Studies Home Economics* 16:19–32.
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- 1984–1987. *Journal of Consumer Studies and Home Economics* 14:165–75.
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- 1989 • Hira, T. K., and S. Nagashima. Satisfaction with selected aspects of household finances among Japanese. *Journal of the Japan Society of Household Economics* 5:179–92.
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- 1987 • Hira, T. K. Money management practices influencing household asset ownership. *Journal of Home Economics* 79 (2): 19–22.
- 1987 • Hira, T. K., and O. Mugenda. Families' perspective of the bankruptcy process. *Family Perspective* 21 (1): 59–67.
- 1986 • Hira, T. K., D. M. Norris, and H. E. Van Auken. Fees for services: What determines the size of a financial planners' annual income? *Financial Planning* 15 (11, November): 159–65.
- 1986 • Hira, T. K., H. E. Van Auken, and D. M. Norris. Financial planning consumer: Who are they? What do they buy? *Journal of the Institute of Certified Financial Planners* 7 (4, Winter): 221–8.
- 1986 • Hira, T. K., H. Van Auken, and D. Norris. A look behind the scene: A survey of how CFPs work. *Journal of the Institute of Certified Financial Planners* 7 (2, Summer): 69–85.

- 1985 • Ulrichson, M. A., and T. K. Hira. The impact of financial problems on family relations. *Family Perspective* 19 (3): 177–88.
- 1983 • Hira, T. K. Is Canadian bankruptcy law in accord with present economic situation? *Canadian Home Economics Journal* 33 (4): 206–8.
- 1982 • Hira, T. K. Socioeconomic characteristics of families in bankruptcy. *Canadian Home Economics Journal* 32 (1): 26–34.
- 1982 • Hira, T. K., and K. Leskiw. Importance of financial counseling for families in debt. *American Home Economics Journal* 4 (2): 28–30.
- 1980 • Hira, T. K. Evaluation of small debtors program in Manitoba. *Manitoba Law Journal* 11 (1): 101–9.

Submitted for Publication

Loibl, Caezilia and Tahira K. Hira. Workplace Financial Education and Employee Financial Behavior: The Role of Self-Directed Financial Learning. *The Journal of Financial counseling and Plannning*.

Tahira K. Hira and Caezilia Loibl. A gender perspective on the use of supplemental health care plans. *International Journal of Consumer Studies*

Loibl, Caezilia and Tahira K. Hira. Impact of Self-directed Financial Learning on Financial and Career Satisfaction of White-Colar Employees. *Financial Counseling and Planning*

Loibl, Caezilia and Tahira K. Hira. 2004. The Effect of Financial Conversation on Financial Learning and its Outcomes. *Financial Services Review*

Books and Chapters in Books

- 1997 • Hira, T. K. Application of financial counseling skills to work with delinquent clients. In *Credit Counseling*. Ed. T. Nishimura, 75–88. Tokyo, Japan: Oriental Economic Press.
- 1996 • Hira, T. K., and A. Swift. Application of a resource management model to improve family financial well-being. In *Family Resource Management Issues*. Ed. L. Engberg, J. Varjour, and H. Steinmiller, 109–13. International Federation of Home Economics (IFHE): Family Resource Management Committee.
- 1996 • Hira, T. K. Ethics: Personal and professional implications. In *A Book of Readings: The Context for Professionals in Human, Family and Consumer Sciences*. Ed. C. Simerly, H. Light, and D. Mitsifer, 163–6. Alexandria, Virginia: American Association of Family and Consumer Sciences.
- 1993 • Hira, T. K. Determinants of effects of bankruptcy and satisfaction with bankruptcy (a solution to credit problems): An international comparison. In *Cross-Cultural Approaches to Home Management*. Ed. R. von Schweitzer, 18:177–211. Campus Verlag, Frankfurt Main, Giesen, Germany: Reihe Stifung Der Private Haushalt.

- 1989 • Hira, T. K. Causes and effects of consumer bankruptcies. In *International Comparative Research Studies: Consumer Bankruptcies*. Tokyo, Japan: Research Institute of Labor Banks.
- 1988 • Nagashima, S., T. K. Hira, S. Shirai, and Y. Otsuka. Life planning and family financial management. In *Analysis of Current Conditions: Issues and Problems in Consumer Education*. Ed. Dr. Mitsuaki Imai, 73–94. Tokyo, Japan: Japan Academy of Consumer Education.
- 1985 • Hira, T. K. Impact of family financial management practice on household's solvency status. In *The Age of Home Economics*. Ed. Ujie and Matsuda. Tokyo, Japan: Institute of Human Ecology.

**Manuscripts
Under Review**

- Hira, T. K., and C. Loibl. Financial education in the workplace: The effects on employee beliefs about their future financial situation and employee commitment. *Journal of Consumer Affairs*. (under second review)
- Loibl, C., and T. K. Hira. Effects of financial education on self-directed financial learning and career satisfaction of lower-level, white-collar workers. *Journal of Vocational Behavior*.

**Papers in Refereed
Proceedings**

- 2004 • Hira, Tahira, K., Bridging the Divide in Changing Societies: The potential of and Challenges for Home Economics from a Northern perspective (Invited Paper) Proceedings of the International Federation of Home Economics, The 20th World Congress August 1 – 7, 2004. Kyoto, Japan (pp 19-31) Science Council of Japan and the Japanese Society of Home Economics
- 2001 • Hira, T. K., and M. Anderson. Financial beliefs, feelings, and behaviors of college students. In *Proceedings of the Annual Conference of the Eastern Family Economics Resource Management Association*, 40–61.
- 1999 • Hira, T. K., and O. M. Mugenda. Do men and women differ in their financial beliefs and behaviors? In *Eastern Family Economics and Resource Management, Association Conference Proceedings*, 1–80. University of Texas, Austin, Texas.
- 1995 • Hira, T. K., H. Noh, and M. Winter. Relationship between borrowing practices and financial difficulties among rural households. In *Financial Empowerment: Financial Counseling and Planning Across the Life Cycle*, ed. C. Y. Kratzer, 21–31. National Pre-Conference of the Association for Financial Counseling and Planning Education, New Orleans, Louisiana.
- 1994 • Hira, T. K. Ethics: What we do? What do we teach? Implications for professionals. In *Public Policy and Economic Well-being: The Financial Counselor's Role*, ed. R. H. Lytton, 213–324. VPI and State University, Blacksburg, Virginia.
- 1994 • Hira, T. K., A. Swift, and K. L. Kostecky. Development of a diagnostic instrument to identify family problems among financial counseling clients. In *Public Policy and Economic Well-being: The Financial Counselor's Role*, ed. R. H.

Lytton, 312–24. VPI and State University, Blacksburg, Virginia.

- 1993 • Dufresne, T. J., and T. K. Hira. Bankrupts' decision-making and coping process: A relationship among pre-bankruptcy factors. In *Challenges for Financial Counseling and Planning Professionals*, ed. V. S. Fitzsimmons, 160–71. University of Illinois, Urbana, Illinois.
- 1993 • Hira, T. K., and U. Sumarwan. Predictors of financial strain and satisfaction with financial status of rural elderly. In *Diversity Among Economically Vulnerable Households*, ed. E. Davis and J. Gilbreth, 190–214. Family Economics and Home Management, pre-conference, University of Nebraska, Lincoln, Nebraska.
- 1992 • Hira, T. K. The rehabilitative aspect of consumer bankruptcy procedures. In *Mind and Money: The Quest for Financial Control and Stability*, ed. D. Iams, 120–38. The Association for Financial Counseling and Planning Education Annual Conference, The University of Arizona, Tucson, Arizona.
- 1991 • Mugenda, O., T. K. Hira, and A. Fanslow. Influence of net worth, financial planning and satisfaction with quality of life. In *Financial Challenges for the Twenty-first Century*, ed. Sharon Danes, 141–55. Association for the Financial Counseling and Planning Education, University of Minnesota, St. Paul, Minnesota.
- 1990 • Hira, T. K. Causes and effects of consumer bankruptcies: An international comparison. In *Many Perspectives Coming Together*, ed. Robert Weagley, 21–38. Association for Financial Counseling and Planning Education, University of Missouri, Columbia, Missouri.
- 1988 • Hira, T. K. Money management practices and satisfaction with various aspects of households' finances among Japanese. In *Families and Finances: Agenda for the Future*, ed. William C. Bailey, 29–43. Association for Financial Planning and Counseling Education, Lubbock, Texas.
- 1988 • Mugenda, O. M., T. K. Hira, and A. M. Fanslow. Effect of spousal communication on household's satisfaction with financial situation and quality of life. In *Proceedings of the American Council on Consumer Interest*, 151–4. University of Missouri, Columbia, Missouri.
- 1987 • Hira, T. K., D. Norris, and H. Van Auken. Certified female financial planners: How they differ from male planners. In *Academic Symposium Proceedings*, 209–28. International Association for Financial Planning. Atlanta, Georgia.
- 1986 • Hira, T. K., D. Norris, and H. Van Auken. Certified financial planners: A practice profile. In *Quality Control in an Emerging Profession*, ed. K. Kitt, 96–107. Association for Financial Counseling and Planning Education, Chicago, Illinois.
- 1986 • Hira, T. K., D. Norris, and H. Van Auken. Factors influencing levels and methods of setting financial planning fees. In *Academic Symposium Proceedings*, 25–36. International Association of Financial Planning, Chicago, Illinois.
- 1986 • Dane, M. S., and T. K. Hira. Knowledge, attitudes, and practices in the use of

credit. 234–60. In *American Council on Consumer Interest Proceedings*. St. Louis, Missouri.

- 1985 • Hira, T. K., H. Van Auken, and D. Norris. Certified financial planners: Their products, services and strategies. In *Academic Symposium Proceedings for Financial Planning*, 51–70. International Association for Financial Planning, Anaheim, California.
- 1985 • Hira, T. K., and C. Fletcher. Impact of technology on deregulation on personal financial management. In *Thinking Globally-Acting Locally—The Balancing Act*, ed. S. Nickols, 207–15. The Family Economics/Home Management Pre-Conference Workshop, The American Home Economics Association, Temple University, Philadelphia, Pennsylvania.
- 1984 • Mueller, J., and T. K. Hira. Impact of selected money management practices on household solvency status. In *Consumer Responsibility/Corporate Responsibility*, ed. K. Goebel, 76–9. American Council on Consumer Interest, 30th Annual Conference, Atlanta, Georgia.
- 1983 • Ulrichson, A., and T. K. Hira. The effect of exemption regulations on personal bankruptcies. In *Changes in Economic Policy—Implications for Family Well-Being*, ed. J. Burton, 42–7. Annual Western Regional Family Economics and Home Management.

Refereed Abstracts

- 2004 • Hira, T. K., and Caecilia Loibl. Financial education and the use of advanced health insurance among female employees. Research and practioners paper Abstracts (p.74). The 20th World Congress of Internal Federation of Home Economics. Kyoto Japan
- 1996 • Hira, T. K., K. L. Kostecky, and H. Carr. Childhood experiences influencing current financial situations of college students in the U.S. and New Zealand. [abstract] In *Living Conditions: A Global Responsibility: The Role of Home Economics*, ed. Brittin et al., 44. International Federation of Home Economics. World Congress Research Abstracts, Texas Tech, Lubbock, Texas.
- 1994 • Strand, J. K., T. K. Hira, and R. B. Carter. Repeat consumer bankruptcy: A comparative analysis with one-time petitioners in the United States and Canada. [abstract] In *Public Policy and Economic Well-Being: The Financial Counselors' Role*, ed. R. H. Lytton, 142. VPI and State University, Blacksburg, Virginia.
- 1993 • Hira, T. K., and M. D. Norris. Differences in opinions about disclosure and regulation among certified financial planners. [abstract] In *Challenges for Financial Counseling and Planning Professionals*, ed. V. S. Fitzsimmons, 228. University of Illinois, Urbana, Illinois.
- 1993 • Fanslow, A., N. Helgersen, and T. K. Hira. Money manager's competencies over time: Their effect on capital accumulation. [abstract] In *Research Abstracts of 1993 American Home Economics Annual Meeting*, ed. S. Helmick and L. Burns. Oregon State University, Corvallis, Oregon.

- 1992 • Hira, T. K., and S. Nagashima. Attitude toward credit, lending and borrowing practices affecting consumers in bankruptcies: An international comparison. [abstract] In *Focusing on Families and Households: Change and Exchange*, 31. XVII World Congress of the International Federation of Home Economics, Hanover, Federal Republic of Germany.
- 1992 • Hira, T. K., N. Wolf, and A. Fanslow. Factors influencing the level of household savings. [abstract] In *Annual Meeting of the American Home Economic Association*, ed. S. Helmick, 125. Oregon State University, Corvallis, Oregon.
- 1991 • Sumarwan, U., and T. K. Hira. Perception of income adequacy and control over financial situation as predictor of subjective economic well-being. [abstract] In *Family Economic Well-Being in the Next Century*, ed. J. Bauer, 63. University of Minnesota, St. Paul, Minnesota.
- 1991 • Hira, T. K., and U. Sumarwan. The impact of chronic health conditions and financial strain on the subjective economic well-being. [abstract] In *Family Economic Well-Being in the Next Century*, ed. J. Bauer, 60. University of Minnesota, St. Paul, Minnesota.
- 1990 • Sumarwan, U., and T. K. Hira. Financial management practices influencing satisfaction with household's financial status. [abstract] In *Abstracts of Research Presentations 1990 Annual Meeting*, ed. C. J. Peck, 37. American Home Economics Association. Bloomington, Illinois: Meridian Education Corporation.
- 1989 • Hira, T. K., and K. P. Varco. Use of consumer debt and satisfaction with level of living among rural older adults. [abstract] In *Families in Transition: Structural Changes and Effects on Family Life*, ed. R. Walker, 205. American Home Economics Associations, Alexandria, Virginia.

**Non-refereed Papers
(Proceedings
and Other)**

- 1997 • Hira, T. K., K. Monson, and C. Ingram. Gambling: Impact on family and family finances. In *Gambling and the Family. Conference Proceedings*, ed. D. Draper and C. Johnson. The College of Family and Consumer Sciences, Iowa State University, Ames, Iowa.
- 1997 • Hira, T. K., C. Ingram, and K. Monson. Gambling among college students—Their behaviors and beliefs. In *Gambling and the Family. Conference Proceedings*, ed. D. Draper and C. Johnson. The College of Family and Consumer Sciences, Iowa State University, Ames, Iowa.
- 1995 • Hira, T. K. Credit counseling for insolvent debtor: Implications for debtors and creditors. In *Credit Age*. 10–11 March, Japan Consumer Finance Association, Osaka, Japan.
- 1995 • Hira, T. K. Determinants of saving behavior of American consumers. In *Credit Age*. 4–9 March, Japan Consumer Finance Association, Osaka, Japan.
- 1995 • Hira, T. K. The credit problems of the US consumers and role of financial counseling. In *Credit Age*. 4–9 March, Japan Consumer Finance Association,

Osaka, Japan.

- 1990 • Hira, T. K. Financial planning software. *Advancing Consumer Interest* 2 (2): 31–2.
- 1988 • Hira, T. K., and T. L. Frey. Personal financial planning as a potential extension education program. In *The New Agricultural* (conference proceedings), 2–13. North Central Regional Extension Farm Management, Ames, Iowa.
- 1987 • Swift, A. V., and T. K. Hira. Household interaction patterns in family finance area. 190–214. 16th Annual Conference, Southeastern Regional Family Economics and Home Management, Tennessee.
- 1986 • Hira, T. K. Financial management practices of two-income households. In *Consumer Services for the Family: 15th Annual Conference*, ed. G. Pyles, 57–62. Southeastern Regional Family Economics and Home Management, Akron, Ohio.
- 1985 • Hira, T. K. Determinants of household asset ownership. In *14th Annual Conference Proceedings, Southeastern Regional Family Economics and Home Management*, 5–10. Louisiana State University, Baton Rouge, Louisiana.
- 1984 • Hira, T. K., and O. Mugenda. The evaluation of bankruptcy process in Iowa. In *Productivity: Families Work, and the Economy*, ed. I. Leech, 142–51. 13th Annual Conference, Southeastern Regional Family Economics and Home Management, Virginia Polytechnic State University, Blacksburg, Virginia.

Technical Reports

- 2002 • *Lean Personal Financial Management: Key to Employee Financial Well-Being*. Educator's Manual; Student Manual. Iowa State University, University Extension. Iowa Manufacturing Extension Partnership.
- 2001 • Hira, T. K., and F. M. Itote. *Impact of Financial Education on Employee Well-Being and Loyalty: A Longitudinal Study*. Ernst and Young. June. Iowa State University, Ames, Iowa.
- 2000 • Hira, T. K., and L. S. Power. *Assessment of Employer Provided Retirement Planning Support and Employer Satisfaction During Retirement*. Iowa State University, Ames, Iowa.
- 2000 • Hira, T. K. *Employee Financial Well-Being and Company Loyalty*. Ernst and Young. February. Iowa State University, Ames, Iowa.
- 1997 • Hira, T. K., K. Monson, A. M. Fanslow, and K. J. Kim. *Evaluation of Training Programs that Assist Family Investment Program Participants Move Toward Self-Sufficiency*. Child Welfare Training Research Project. Iowa State University. Ames, Iowa.
- 1997 • Hira, T. K. *A Study of ISU Faculty and Staff Professional Development Experiences*. June. For President's Office. Iowa State University. Ames, Iowa.
- 1996 • Hira, T. K. *Strategic Planning Progress during 1995–1996: Highlights and*

Benchmark Measures. October. For President's Office. Iowa State University. Ames, Iowa.

- 1996 • Hira, T. K., K. Monson, and A. M. Fanslow. *Formulative Evaluation of the Progress of Review and Adjustment Unit (REVAD) Participants in Gaining Job Skills*. Child Welfare Training and Research Project. Iowa State University. Ames, Iowa.
- 1989 • Hira, T. K. *Evaluation of Bankruptcy Procedures and Proposal for New Directions*. Prepared for the Deputy Superintendent of Bankruptcy. Consumer and Corporate Affairs Canada. Ottawa/Hull.
- 1989 • Hira, T. K. *Causes and Effects of Consumer Bankruptcies—An International Comparison: United States, Canada, Scotland, and Japan*. Prepared for Rodo-Kinko Kyokai. Labor Bank Association. Tokyo, Japan.
- 1987 • Hira, T. K. *Analysis of Debt Structure of Scottish Families: 1984–1987*. Prepared for the Scottish Association of Citizens Advice Bureau. Edinburgh, Scotland, UK.
- 1979 • Hira, T. K. *A Study of the Small Debtor Program in Manitoba: 1973–1977*. Prepared for Consumer and Corporate Affairs. Office of the Superintendent of Bankruptcy. Manitoba, Canada.

Published Book Reviews

- 1993 • Hira, T. K. Review of *Buy Now, Pay Later: Advertising, Credit, and Consumer Durables in the 1920s*, by Martha L. Olney. Chapel Hill, North Carolina: The University of North Carolina Press. *Journal of Consumer Affairs*, 27 (1): 196–9.
- 1981 • Hira, T. K. Review of *Life Insurance: The Consumer Union Report*. *Canadian Home Economics Journal* (Spring): 107.
- S
- 1979 • Hira, T. K. Review of *Social Psychological Representation in Television Advertising*, by T. E. Shrimp. *Journal of Consumer Affairs*. *Canadian Home Economics Journal* (Fall): 206.

Other Creative Activities

Courses and Programs Developed

- 2004 • Hira, T.K. “Securing Financial Wellbeing of Individuals and Families” Three day professional development workshop for the Japan Consumer Finance Association member. July 5 – 7. Ames, Iowa
- 2002 • Financial Counseling: Collaboration and Partnership with Non-Profits and Government Agencies. Japan Consumer Finance Association Workshop, September. Ames, Iowa
- 2002 • Introduced a program, “Financial Planning for College Education and Beyond,” at ISU New Student Orientation. Generated financial support for the development of standardized presentation materials and coordinated a group of presenters to cover 18 sessions for a first-ever summer orientation program on managing college finances. This session will be part of all future

student orientation programs.

- 2001 • Revised a weeklong workshop, "Financial Counseling: A New Approach," for Japan Consumer Finance Association. Presented at ISU to a national group of 20 middle- and upper-level managers of various consumer finance companies.
- 1999–2002 • Served on a national team assigned to develop and monitor family and consumer science curriculum for a four-year degree program at Zayed Women's University, Dubai, United Arab Emirates.
- 1997 • Revised a weeklong workshop, "Financial Counseling Skills," for Japan Consumer Finance Association. Presented at ISU to a national group of 25 middle- and upper-level managers of various consumer finance companies.
- 1997 • Presented a three-day workshop on "A New Approach to Collection" for Citibank Recovery Unit, Kansas City, Kansas.
- 1997 • Presented a graduate-level course, Topics in Financial Planning, for ISU's Family and Consumer Sciences master's degree program. The course was designed for delivery through the Iowa Communication Network (ICN).
- 1996 • Supervised a special honors research project (student: Karen L. Peterson), "Analysis of Student Debt," that resulted in the development of informational materials to help students more effectively manage their debt.
- 1996 • Developed a two-week workshop on "Financial Counseling: A Tool for Creditors" for Japan Consumer Finance Association. Presented workshop at ISU to a national group of 27 middle- and upper-level managers of various consumer finance companies.
- 1995 • Developed an honors course, The Role of Money in Family Relations. Economics and psychology theories of consumer behavior and current research provided basis for the course, which was taught Spring 1995, Spring 1996, and Spring 1998.
- 1993 • Developed graduate-level course, Advanced Family Financial Counseling (HDFS 589). This course was developed specifically for students interested in careers in financial counseling and marriage and family therapy. It applied sociological and psychological explanations (theory and research) of human behavior to money behavior.
- 1986 • Established ISU Family Financial Counseling Clinic. This clinic is unique in the nation since it was developed in partnership with ISU's Government of the Student Body. The clinic serves as a teaching and research laboratory for students majoring in financial counseling. Students get actual experience working with individuals and families, and clinic records are also used to conduct research in financial counseling.
- 1986–1990 • Developed a graduate curriculum option, Management of Financial Aid Services. The program was offered in cooperation with ISU's financial aid and student employment offices. The financial aid office provided 12-month assistantships to a maximum of three students.

- 1984–1985 • Developed two senior-level courses for students majoring in family resource management—Advanced Family Financial Management (FE 483) and Family Financial Counseling (FE 489).
- 1984–1985 • Developed and presented Family Financial Counseling (FE 493) using Regent’s Tele-bridge system for on-campus students and ISU Extension field specialists. Course was offered at three locations throughout the state as well as the ISU campus.
- 1983–1984 • Adapted a credit course, Introduction to Family Financial Management (FE 283), for statewide delivery via television.
- 1982 • Developed an undergraduate curriculum in family financial counseling at ISU.
- 1981 • Developed Introduction to Family Financial Management (FE 283).
- 1978 • Developed a senior-level family financial counseling course at the University of Manitoba, Canada.

Invited Presentations to Professional Organizations/Groups

International Presentations

- 2004 • Hira, T. K. “Barriers—Bridging the Divides among the Societies: The Potentials of and Challenges for Home Economics.” International Federation of Home Economic Congress, Kyoto, Japan, August 3rd (keynote)
- 2003 • Hira, T. K. “Importance of Financial Literacy in the Current Technology and Information Environment.” Japan Consumer Finance Association (JCFA) Consumer Finance Symposium, Osaka/Tokyo, Japan, October.
- 2003 • Hira, T. K. “Challenges Facing the Debt Counseling Industry in America and Global Implications.” Japan Consumer Finance Association (JCFA) Financial Counseling Workshop, Tokyo, Japan, October.
- 2003 • Hira, T. K. “Critical Elements of Financial Education for High School Students.” Consumer Education Association of Tokyo, Tokyo, Japan, October.
- 2003 • Hira, T. K. “Impact of the Proposed U.S. Consumer Bankruptcy Legislation on Credit Counseling and Financial Education of the American Consumer.” Annual Conference of the Academy of Consumer Finance and Services, Sapporo, Japan, November. (keynote)
- 2003 • Hira, T. K. “Impact of Regulations on the Availability and Cost of Financial Products and Services.” Annual Conference of the Academy of Consumer Finance and Services, Sapporo, Japan, November. (panel member)
- 2001 • Hira, T. K. “Financial Planning: A New Approach to Curriculum in Family Economics and Management.” University of Putra, Kuala Lumpur, Malaysia. (weeklong seminar)
- 2000 • Hira, T. K. “Financial Planning Education: A Requirement for Consumers in the 21st Century.” Japan Association of Consumer Education, Nagoya, Japan.

(keynote)

- 1999 • Hira, T. K. "The Nature of a Fresh Start and The Role of Financial Education in Granting Discharge to Chapter 7 Debtors." INSOL International Conference of the Americas, Bermuda.
- 1998 • Hira, T. K. "Importance of Financial Management Education as Part of Family Resource Management in Developing Economies." College of Home Economics, Lahore, Pakistan.
- 1997 • Hira, T. K. "Credit Culture and the Need for Money Management Education." University of Putra, Kuala Lumpur, Malaysia.
- 1996 • Hira, T. K. "Application of Family Resource Management Model To Improve Family Financial Well-Being." International Federation of Home Economics Congress, Bangkok, Thailand.
- 1995 • Hira, T. K. "Credit Counseling Model: Implications for the Industry." Consumer Finance Association Conference, Osaka, Japan.
- 1995 • Hira, T. K. "Consumer Credit Issues and the Role of Money Management Education and Credit Counseling." Japan-American Consumer Education Conference, Tokyo, Japan. (keynote)
- 1995 • Hira, T. K. "Factors Influencing Saving Behavior of American Households." Japan-American Consumer Education Conference, Tokyo, Japan.
- 1994 • Hira, T. K. "Underlying Causes of Family Financial Problems and Development of Appropriate Financial Counseling Techniques." Otago Budget Advisory Services district meeting, Dunedin, New Zealand.
- 1994 • Hira, T. K. "Changing Family Structure and the Economic Well-Being of New Zealand Families." New Zealand Federation of Family Budgeting Services, Wellington, New Zealand. (keynote)
- 1994 • Hira, T. K. "Why We Must Develop Formal Educational Courses in Financial Planning." Rotary International, Dunedin, New Zealand.
- 1994 • Hira, T. K. "Status of Financial Planning Profession and Professionals in the U.S.A: Implications for Institutions of Higher Education." Investment Portfolio Design and Securities Limited, Auckland, New Zealand.
- 1994 • Hira, T. K. "Consumer Debt and Consumer Bankruptcy in the U.S.A.: The Need for Money Management Education and Financial Counseling." Association of Home Science Alumnae of New Zealand, Inc., Dunedin, New Zealand.
- 1992 • Hira, T. K. "International Comparison of Consumer Bankruptcy and Consumer Debt." Annual meeting of National Conference of Bankruptcy Clerks (NCBC), Acapulco, Mexico. (keynote)
- 1990 • Hira, T. K. "Risk Management Practices and Their Impact on Household's Satisfaction with Financial Status." Nara Women's University Department of

Consumer Economics and Resource Management, Nara, Japan.

- 1990 • Hira, T. K. "Differences in Options Available to Consumers Defaulting on Their Credit Obligations: Comparison Among U.S.A., Canada, Japan, and Scotland." International Credit Conference, Quebec City, Quebec, Canada.
- 1989 • Hira, T. K. "Analysis of Debt Structure Among Bankrupts: An International Comparison." The West-London University, London, England.
- 1989 • Hira, T. K. "Relationship Between Consumer Bankruptcies and Family Poverty in Scotland." Citizens Advice Scotland Jubilee National Conference on Poverty, Glasgow, Scotland.
- 1989 • Hira, T. K. "Determinants of Household Assets Management Among Japanese: A Systems Approach." National Taiwan Normal University, Taipei, Taiwan.
- 1989 • Hira, T. K. Invited to be the resource leader in the professional development program for official receivers of the bankruptcy branch. Conducted by Superintendent of Bankruptcy, Consumer, and Corporate Affairs Canada, Halifax, Canada.
- 1987 • Hira, T. K. "Credit Unions and Their Role in Financial Counseling in the United States." Annual meeting of North Edinburgh Credit Union, Edinburgh, Scotland.
- 1987 • Hira, T. K. "Assessment and Evaluation of Family Financial Management Curriculum for Home Economics Educators." Manchester Polytechnic Institute Department of Home Economics, Manchester, England.
- 1987 • Hira, T. K. "Consumer Credit Problems Affecting U.S. Families." Jubilee Centre for Family Research, Cambridge, England.
- 1987 • Hira, T. K. "Role of Education To Alleviate Family Financial Problems." Institute of Home Economics, Scottish Branch, Queens College, Glasgow, Scotland.
- 1987 • Hira, T. K. "Factors Contributing to Family Financial Problems." Institute of Home Economics, Scottish Branch, Queens College, Glasgow, Scotland.
- 1986 • Hira, T. K. "Impact of Financial Problems on Family Living and Family Financial Management Education." Hyogo University of Teacher Education, Ubeshinodai, Japan.
- 1986 • Hira, T. K. "Household's Financial Management Practices Influencing Solvency and Satisfaction." Japan Society of Household Economics, Osaka, Japan. (keynote)
- 1986 • Hira, T. K. "Consumer Bankruptcies in the U.S. and Canada: Causes and Effects." Osaka Bar Association, Osaka, Japan.
- 1986 • Hira, T. K. "Factors Influencing Various Aspects of Household Financial Management." 8th International Home Economics Research Conference,

Glasgow, Scotland.

**National and
Regional**

- 2004 • Hira, T. K. "Consumer Bankruptcy—Global Comparisons (North America, Asia, and Europe)." EFERMA Symposium on Consumer Bankruptcy, February.
- 2003 • Hira, T. K. "Factors Influencing Borrowers' Money Behavior: Evidence from the Research." Credit Industry Research Council (CIRC), Fall Conference, Scottsdale, Arizona, September.
- 2003 • Hira, T. K. "Need for Financial Education: Why Now?" Connecticut State Board of Education Financial Literacy Symposium, Hartford, Connecticut, March 27. (keynote)
- 2003 • Hira, T. K. "Need for Financial Education: Role of Family and Consumer Sciences Professionals." Annual Conference, Wisconsin Family and Consumer Sciences, Madison, Wisconsin, March 7.
- 2003 • Hira, T. K. "Predictors of Family Economic Well-Being." Journalism Fellowships in Child and Family Policy Conference, University of Maryland, Washington D.C., January 8.
- 2002 • Hira, T. K. "Family and Consumer Sciences: A Profession for the Future." Annual meeting of New Mexico Association of Family and Consumer Sciences, Albuquerque, New Mexico.
- 2001 • Hira, T. K. "Family and Consumer Sciences: Future Directions." Arizona Family and Consumer Science Association, Tucson, Arizona.
- 1999 • Hira, T. K. "Socio-Psychological Aspect of Money Behavior (Individual and Family Dynamics): Response From Academia." The National Association of Personal Finance Advisors (NAPFA), Advance Planners Conference, Denver, Colorado.
- 1998 • Hira, T. K. "Bankruptcy and Gambling in Iowa: Is There a Connection?" Annual conference for the National Coalition Against Gambling Expansion, St. Louis, Missouri.
- 1997 • Hira, T. K. "Financial Beliefs and Behaviors of College Students." InTouch Forum, annual conference for student loan officers and financial aid advisors, Jacksonville, Florida.
- 1997 • Hira, T. K. "Distance Education and Delivery Media: Implications for Teaching." American Association Family and Consumer Sciences, Washington, D.C. (panel member)
- 1997 • Hira, T. K. "Beijing Action Group: Implementing the Beijing Platform." American Association Family and Consumer Sciences, Washington, D.C. (international section, panel member)
- 1997 • Hira, T. K. "Consumer Credit Culture: Implications for the 21st Century."

International Credit Association (ICA) District VI Conference, Omaha, Nebraska.

- 1996 • Hira, T. K. "Women and Financial Planning: Their Role in Creating and Preserving Family's Wealth." Iowa Cattlemen's Association Convention, Des Moines, Iowa.
- 1996 • Hira, T. K. "Consumer Behavior: An Important Variable in the Credit Risk Model." Citicorp's global credit conference, Las Vegas, Nevada.
- 1996 • Hira, T. K. "Financial Attitudes, Beliefs, and Behaviors: Differences by Age." National Conference of International Credit Association (ICA), New Orleans, Louisiana.
- 1996 • Hira, T. K. "Lifestyle Concerns for Those Planning To Retire." John Deere Company, Des Moines, Iowa.
- 1996 • Hira, T. K. "Financial Planning for Female Small Business Owners." Iowa Association of Cosmetologists, Des Moines, Iowa.
- 1996 • Hira, T. K. "Social and Psychological Factors Influencing Saving and Spending Behavior of American Consumers." International Credit Association, Iowa Chapter, Des Moines, Iowa.
- 1996 • Hira, T. K. "Money Personalities: An Empirical Look." Nazaruddin Financial Planning Group, Santa Fe, New Mexico.
- 1995 • Hira, T. K. "Understanding Forces Behind Money Behavior: Implications for Financial Advisors." Annual retreat of the Colorado Society of Certified Financial Planners (CFPs), Breckenridge, Colorado.
- 1995 • Hira, T. K. "Social and Psychological Aspects of Money: Implications for High School Teachers." International Credit Association (ICA) of Midlands, Train the Trainers seminar, Omaha, Nebraska.
- 1995 • Hira, T. K. "Family Resource Management Approach To Moderating the Effect of Toxic Environment on Children." Invited response to James Garbarino's keynote address at the 2nd General Session of American Association of Family and Consumer Sciences, New Orleans, Louisiana.
- 1995 • Hira, T. K. "Role of Family in Developing Money Management Attitudes: An Insight for Financial Professionals." Master planner section of the annual conference of the Institute of Certified Financial Planners (ICFP), San Diego, California. (keynote)
- 1995 • Hira, T. K. "Ethics Work for Professionals in Financial Planning." Iowa Society of Certified Financial Planners, Des Moines, Iowa.
- 1994 • Hira, T. K. "Understanding the Needs and Resources Available To Work with Limited Resource Adults." National conference sponsored by the National Coalition for Consumer Education and AT&T Consumer Credit Education Fund, Jacksonville, Florida.

- 1994 • Hira, T. K., and M. Born. "Professional Ethics: What Do We Teach? What Do We Do? Implications for the Profession." Association for Financial Counseling, Planning and Counseling Education, Nashville, Tennessee.
- 1994 • Hira, T. K. "Financial Planning Needs and Processes: Implications for Women." Iowa Home Economics Educators' Conference, Des Moines, Iowa.
- 1994 • Hira, T. K. "Differences in Bankruptcy Circumstances and Consequences for Petitioners Filing Under Chapter 7 vs. Chapter 13." Annual seminar of National Association of Chapter 13 Trustees, Albuquerque, New Mexico.
- 1993 • Hira, T. K. "Levels of Credit Use and Savings Among Americans: Policy Implications." Personal Economics Summit; The Institute of Certified Financial Planners, Washington, D.C.
- 1993 • Hira, T. K. "International Consumer Credit Trends." 1993 International Credit Association (ICA), Train the Trainer seminar, Omaha, Nebraska.
- 1993 • Hira, T. K. "The Strategic Role of Academic Involvement in the Future of Financial Planning Profession." Annual retreat of the Institute of Certified Financial Planners (ICFP), Yale University, New Haven, Connecticut.
- 1993 • Hira, T. K. "Retirement Planning: Research Findings and Implications for Female Baby Boomers." American Home Economics Association (AHEA), Orlando, Florida.
- 1993 • Hira, T. K. "Research Linkages within Agricultural Experiment Stations." American Home Economics Association (AHEA), research section, Orlando, Florida.
- 1993 • Fanslow, A. M., N. J. Helgersen, and T. K. Hira. "Iowa Money Manager Project: 1982–1991." Des Moines Association of Life Underwriters, Des Moines, Iowa.
- 1992 • Hira, T. K. "Economic Well-Being of American Families: Gearing Up for the International Year of the Family, 1994." Annual meeting of International Section of the American Home Economics Association, Denver, Colorado.
- 1991 • Hira, T. K. "The Financial Planning Industry Outlook: Regulations, Future, and Marketing of Financial Planning Services." Personal Financial Planning Committee of the Iowa Society of CPAs, Des Moines, Iowa.
- 1990 • Hira, T. K. "Investing Wisely Over the Life Cycle." Northwest Regional meeting of Iowa Home Economics Association, Ames, Iowa.
- 1989 • Hira, T. K. "Financial Decision Making Patterns Among Japanese Households." University of Hawaii Department of Human Resources, Mauna, Hawaii.
- 1989 • Hira, T. K. "Impact of Consumer Bankruptcy on Debtor's Family Life: An International Comparison." 19th Advance Procedures Bankruptcy Conference, Cedar Rapids, Iowa.

- 1989 • Hira, T. K. "Role of Bankruptcy as a Legal Alternative for Overextended Debtors." Accent Financial Services, West Des Moines, Iowa.
- 1989 • Hira, T. K. "Changes in Household Financial Status Influencing Level of Satisfaction: 1982-86." Annual meeting of American Association of University Women, Marshalltown, Iowa.
- 1989 • Hira, T. K. "Impact of Bankruptcies on Families: An International Comparison." Regional meeting of Family and Consumer Sciences Alumni Association, Focus on Research, Cedar Rapids, Iowa.
- 1988 • Hira, T. K. "Causes and Effects of Consumer Bankruptcies." Iowa Credit Society, Des Moines, Iowa.
- 1988 • Hira, T. K. "Retirement Planning for Farm Families: Investment Strategies." Iowa State University Extension in-service training, Ames, Iowa.
- 1988 • Hira, T. K. "Evaluation of Consumer Bankruptcy Process: International Comparisons." International Conference on Consumer Bankruptcy, Ames, Iowa.
- 1988 • Hira, T. K. "Consumer Attitude Toward Financial Planning and Financial Planners." Estate Planning Council, Cedar Rapids, Iowa.
- 1988 • Hira, T. K. "Similarities and Differences Between Insolvent Consumers in U.S.A., Japan, Canada, and Scotland." Iowa State Home Economics Extension Area Consumer/Management Specialist in-service training, Ames, Iowa.
- 1984 • Hira, T. K. "Financial Planning and Its Role In Banking Industry." Iowa Bankers Association Consumer Lending Retail Banking Conference, Des Moines, Iowa.
- 1984 • Hira, T. K. "Research: How It Helps Understand Financial Concerns of Families." Iowa State University Cooperative Extension Service Family Financial Counseling Workshop, Cedar Falls, Iowa.
- 1984 • Hira, T. K. "Role of Home Economics in International Development." Annual meeting of Iowa State University Home Economics Alumni Association, Ames, Iowa.
- 1984 • Hira, T. K. "Exploring the Financial Needs of the Elderly." Iowa State University Cooperative Extension Workshop, Decorah, Iowa.
- 1984 • Hira, T. K. "Importance of Communication Skills in Financial Planning." Financial Planning Institute sponsored by the Iowa Bankers Association, Des Moines, Iowa. (one-day workshop)
- 1984 • Hira, T. K. "Financial Planning: Need and Process." Financial Planning Institute sponsored by the Iowa Bankers Association, Des Moines, Iowa. (three-day session)
- 1983 • Hira, T. K. "Cross-Cultural Perspectives of Illness and Childbearing." Mary

Greeley Medical Center, Ames, Iowa.

- 1983 • Hira, T. K. "Strategies To Cope with Financial Realities after Graduation." Phi-U chapter meeting, Ames, Iowa.
- 1982 • Hira, T. K. "Personal Financial Planning: Strategies and Alternatives." Mosebach, Griffith & Company, Certified Public Accountants, Cedar Rapids, Iowa.
- 1982 • Hira, T. K. "Investment Alternatives for the 80's." Waterloo Area County Extension Service, Waterloo, Iowa.
- 1982 • Hira, T. K. "Retirement Planning for Clergy." Iowa Clergy Economic Education 17th Annual Conference, Boone, Iowa.
- 1982 • Hira, T. K. "Financial Management in an Age of Economic Uncertainty." Annual meeting of Iowa Home Economics Association, Fort Dodge, Iowa.
- 1982 • Hira, T. K. "Personal Financial Management for Young Adults." WOI-TV series, Young People Speak Out, Ames, Iowa.
- 1982 • Hira, T. K. "Families and the Economic Crunch." Families of the Future area conference, Ida Grove, Iowa.
- 1981 • Hira, T. K. "Challenges for Educators in the Area of Family Finance in Today's Economic Climate." Iowa State University Extension area specialists in-service training, Ames, Iowa.
- 1981 • Hira, T. K. "Financial Problems and Money Management for Church Families." Iowa Clergy Economic Education 16th Annual Conference, Boone, Iowa.

Juried Presentations at Professional Meetings

Regional, National, or International

- 2004 Loibl, Caezilia and Tahira K. Hira. The Effect of Financial Conversation on Financial Learning and its Outcomes. Academy of Financial Services Annual Meeting, New Orleans, October 6-7, 2004.
- 2004 Hira, Tahira K. and Caezilia Loibl. A gender perspective on the use of supplemental health care plans. IFHE World Congress, Kyoto, August 6, 2004.
- 2004 • Loibl, C., and T. K. Hira. "Effects of Financial Education on Self-directed Financial Learning and Career Satisfaction of Lower-level, White-collar Workers." The Think Tank on Motivating Americans to Develop Constructive Behaviors, sponsored by National Endowment for Financial Education, Denver, Colorado, May.
- 2004 • Loibl, C., and T. K. Hira. "Effects of Financial Education on Self-directed Financial Learning and Career Satisfaction of Lower-level, White-collar

Workers.” Accepted for presentation at the annual conference of the American Council on Consumer Interest (ACCI), Washington D. C., April 3–4.
(accepted)

- 2004 • Loibl, C., and T. K. Hira. “Workplace Financial Education and Employee Financial Behavior and Beliefs: The Role of Self-directed Financial Learning.” The annual conference of Eastern Regional Family Economics and Resource Management (EFERMA), Tampa, Florida, February 26–28.
- 2003 • Hira, T. K., and C. Loibl. “Effects of Financial Education in the Workplace on Employee Financial Behavior.” American Council on Consumer Interest. Atlanta, Georgia, April 3.
- 2002 • Hira, T. K., “Predictors of Financial Satisfaction During Retirement.” International Household and Family Research Conference, Helsinki, Finland.
- 2001 • Enders, L., T. K. Hira, B. Miller, and T. Carlson. “A Narrative: Financial Counseling Approach to Gambling Issues.” Annual conference of American Association of Marriage and Family Therapy, Denver, Colorado.
- 2000 • Hira, T. K., and J. Masud. “Cultural Differences in Financial Beliefs and Behaviors Among College Students.” (U.S. and Malaysia) XIX IFHE Congress, Accra, Ghana.
- 2000 • Hira, T. K., M. Anderson, and K. Petersen. “What Do Students Know about Their Education Debt and Impact on Life after Graduation?” American Association of Family and Consumer Sciences, Chicago, Illinois.
- 1999 • Hira, T. K. “The Impact of Gambling on Interpersonal Relationships.” Gambling & Gaming: Winners & Losers? Conference, University of Omaha-Nebraska.
- 1999 • Hira, T. K. “The Impact of Gambling on Household Finances: Role of Financial Educators.” American Association of Family and Consumer Sciences, Seattle, Washington.
- 1998 • Enders, L., T. K. Hira, and B. Miller. “The Impact of Gambling on Interpersonal Relationships.” National conference of American Association of Marriage and Family Therapy, Dallas, Texas.
- 1997 • Hira, T. K. “Work Training Skills of Iowa’s Family Investment Program (FIP) Participants.” Annual meeting of Family Economics–Resource Management and Family Relations–Human Development Pre-Conference to the American Association of Family and Consumer Sciences, Washington, D.C.
- 1996 • Hira, T. K., K. L. Kostecky, and N. Carr. “Childhood Experiences Influencing Current Financial Situation of College Students in the U.S. and New Zealand.” XVIII International Federation of Home Economics Congress, Bangkok, Thailand.
- 1995 • Hira, T. K., H. Noh, and M. Winter. “Relationship Between Borrowing Practices and Financial Difficulties Among Rural Households.” National conference of Association of Financial Counseling and Planning Education

(AFCPE), New Orleans, Louisiana.

- 1995 • Hira, T. K., and K. L. Kostecky. "Methods of Data Collection from Debtors in Bankruptcy—Procedural Concerns." Biennial pre-conference of Family Resource Management, New Orleans, Louisiana.
- 1994 • Hira, T. K., A. Swift, and K. L. Kostecky. "Development of a Diagnostic Instrument to Understand the Role of Family Problems Among Financial Counseling Clients." National conference of the Association for Financial Counseling and Planning Education, Nashville, Tennessee.
- 1994 • Garrison, M. E., R. H. Norem, T. K. Hira, and M. Dewolf. "Revisiting Family Health Status." Poster session presented at the national conference of the National Council on Family Relations, Minneapolis, Minnesota.
- 1994 • Malia, J., M. E. Garrison, R. H. Norem, T. K. Hira, and M. Dewolf. "Revisiting Family Health Status." National conference of the National Council on Family Relations, Minneapolis, Minnesota.
- 1994 • Strand, J. K., T. K. Hira, and B. R. Carter. "Repeat Consumer Bankruptcies: A Comparative Analysis with One-Time Petitioners in the United States and Canada." Poster session presented at the national conference of the Association for Financial Counseling and Planning Education, Nashville, Tennessee.
- 1993 • Dufresne, T. J., and T. K. Hira. "An Application of the Double ABCX Model of Family Adaptation to Families Who Have Experienced Financial Stress." National conference of the Association for Financial Counseling and Planning Education, San Antonio, Texas.
- 1993 • Hira, T. K., and D. Norris. "Certified Financial Planners' Attitudes Toward Regulations and Disclosure Requirements." Poster session presented at the national conference of the Association of Financial Counseling and Planning Education, San Antonio, Texas.
- 1993 • Hira, T. K., and U. Sumarwan. "Determinants of Financial Strain and Satisfaction with Financial Status Among Rural Elderly." AHEA, FE-HM pre-conference, Orlando, Florida.
- 1993 • Malia, J., M. E. Garrison, R. H. Norem, and T. K. Hira. "Developing a Family Health Inventory." Annual conference of National Council of Family Relations (NCFR), Baltimore, Maryland.
- 1993 • Garrison, M. E., J. Malia, R. H. Norem, and T. K. Hira. "Measuring Family Daily Hassles: Development of an Inventory." Annual conference of National Council of Family Relations (NCFR), Baltimore, Maryland.
- 1993 • Fanslow, A. M., N. J. Helgersen, and T. K. Hira. "Money Management Competencies of Managers Over Time." Research poster session presented at the American Home Economics Association (AHEA) Conference, Orlando, Florida.
- 1992 • Malia, J. A., M. E. Garrison, R. H. Norem, and T. K. Hira. "Exploratory

Factor Analysis of a Family Health Inventory." Annual conference of National Council on Family Relations (NCFR), Orlando, Florida.

- 1992 • Garrison, M. E., J. Malia, R. H. Norem, and T. K. Hira. "Developing a Daily Hassles Inventory: An Exploratory Factor Analysis." Annual conference of the National Council on Family Relations (NCFR), Orlando, Florida.
- 1992 • Hira, T. K. "Household Resource Management Systems Cross-Cultural Approach: An Application to Credit Management by Household." Household Resource Management International Research Symposium, Ebsdorfergrund, Germany.
- 1992 • Hira, T. K., and S. Nagashima. "Attitudes Toward Credit, Lending, and Borrowing Practices Affecting Consumer Bankruptcies: An International Comparison." XXII International Federation of Home Economics (IFHE) Congress, Hanover, Germany.
- 1992 • Hira, T. K., N. Wolf, and A. Fanslow. "Factors Influencing the Level of Household Savings." Annual meeting of American Home Economics Association, Denver, Colorado.
- 1991 • Garrison, M. E., and T. K. Hira. "The Effect of Daily Hassles, Reported Managerial Behavior, Family Adaptability, and Cohesion on Family Health." Annual conference of National Council on Family Relations (NCFR) Denver, Colorado.
- 1991 • Hira, T. K. "Consumer Default: Policy and Educational Implications, an International Perspective." Family Economics and Home Management workshop, annual conference of American Home Economics Association, Minneapolis, Minnesota.
- 1990 • Garrison, M. E., and T. K. Hira. "The Effect of Daily Hassles, Reported Managerial Behavior, Family Adaptability, and Cohesion on Family Health." 4th Annual Conference on the Family, Family Studies Center, Oxford, Ohio. (accepted but not presented)
- 1990 • Sumarwan, U., and T. K. Hira. "Financial Management Practices Influencing Satisfaction with Household Financial Status." Annual conference of American Home Economics Association, San Antonio, Texas.
- 1989 • Hira, T. K. "Changes in Factors Influencing Consumer Debt Among Scottish Families During 1984–1987." International Home Economics Research Conference, Middlesex Polytechnic Institute, Middlesex, England.
- 1989 • Hira, T. K. "Use of Consumer Debt and Satisfaction with Level of Living Among Rural Adults." Poster session presented at the pre-conference workshop on Family Economics-Home Management, Cincinnati, Ohio.
- 1989 • Titus, P. M., A. M. Fanslow, and T. K. Hira. "Financial Management Knowledge and Behaviors of Household Money Managers." Poster session presented at the annual conference of American Home Economics Association, Cincinnati, Ohio.

- 1989 • Hira, T. K. "Determinants of Consumer Debt Problems Among Scottish Families." Poster session presented at the annual conference of American Home Economics Association, Cincinnati, Ohio.
- 1988 • Hira, T. K. "Money Management Practices and Satisfaction with Various Aspects of Household Finances Among Japanese." Annual meeting of Association for Financial Planning and Counseling Education, Lubbock, Texas.
- 1988 • Hira, T. K. "Determinants of Asset Management Among Japanese Households." XVI Congress of the International Federation of Home Economics, Minneapolis, Minnesota.
- 1988 • Mugenda, O., T. K. Hira, and A. Fanslow. "Impact of Spousal Communication on Household's Satisfaction." Poster session presented at the annual conference of American Council on Consumer Interest, Chicago, Illinois.
- 1988 • Norris, D. M, T. K. Hira, and H. E. Van Auken. "Certification of Personal Financial Planners." Midwest Business Administration Association, St. Louis, Missouri.
- 1987 • Titus, P., A. Fanslow, and T. K. Hira. "Net Worth and Financial Satisfaction as a Function of Money Managers' Competencies." Poster session presented at the annual meeting of American Vocational Association, Washington, D.C.
- 1987 • Nagashima, S., and T. K. Hira. "Family Life Planning: A Management Process." Japan Society of Consumer Education, Nagoya, Japan.
- 1987 • Nagashima, S., and T. K. Hira. "Credit Management Practices Among Japanese Households." Japan Society of Household Economics, Tokyo, Japan.
- 1987 • Mugenda, O. M., and T. K. Hira. "Determinants of Household's Net Worth." Poster research reporting session presented at the annual meeting of American Home Economics Association, Family Economics/Home Management, Indianapolis, Indiana.
- 1987 • Hira, T. K., D. M. Norris, and H. Van Auken. "Factors Influencing Financial Planning Process Followed by Certified Financial Planners." Poster research reporting session presented at the annual meeting of American Home Economics Association, Family Economics/Home Management, Indianapolis, Indiana.
- 1987 • Hira, T. K. "Factors Influencing Satisfaction with Various Aspects of Household's Finances." 1987 pre-conference Family Economics and Home Management workshop of the American Home Economics Association, Indianapolis, Indiana. (keynote address)
- 1987 • Swift, A. V., and T. K. Hira. "Household Interaction Patterns in Family Finance Area." Southeastern Regional Association on Family Economics and Home Management, Chattanooga, Tennessee.

- 1986 • Hira, T. K., and O. M. Mugenda. "The Determinants of Money Managers' Satisfaction with Level of Living and Level of Assets." Building Family Strengths National Symposium, Lincoln, Nebraska.
- 1986 • Hira, T. K. "Family Financial Management Practices of Two-Income Households." Southeastern Regional Family Economics, Home Management Association Meeting, Akron, Ohio.
- 1985 • Hira, T. K. "Determinants of Financial Asset Management Behavior." 14th annual conference of the Southeastern Regional Association on Family Economics and Home Management, Baton Rouge, Louisiana.
- 1984 • Hira, T. K. "Determinants of Household Solvency Status: Applications of a Management Model." XVth Congress of the International Federation of Home Economics, Oslo, Norway.
- 1984 • Danes, S., and T. K. Hira. "Money Management Knowledge of College Students." Building Family Strengths National Symposium, Lincoln, Nebraska.
- 1984 • Mueller, J., and T. K. Hira. "A Managerial System Approach to Money Management Practices of a Household." Southeastern Regional Family Economics, Home Management Conference, Blacksburg, Virginia.
- 1984 • Hira, T. K., and O. Mugenda. "Evaluation of Bankruptcy Procedure in Iowa." Southeastern Regional Family Economics, Home Management Conference, Blacksburg, Virginia.
- 1983 • Hira, T. K. "Evaluation of Financial Counseling/Planning Research Publication Sources." Financial Counseling Consortium, Brigham Young University, Provo, Utah.
- 1983 • Hira, T. K. "Opinions of College Students Towards Credit Card Use." Annual meeting of Canadian Home Economics Association, Saint John, New Brunswick, Canada.
- 1983 • Hira, T. K., and A. Ulrichson. "Impact of Financial Problems on Family Relationships." Annual meeting of American Home Economics Association, Milwaukee, Wisconsin.
- 1983 • Hira, T. K. "Money Management Knowledge, Attitudes, and Practices Among Household." Sixth National Symposium on Building Family Strengths, Lincoln, Nebraska.
- 1982 • Hira, T. K., and G. Bivens. "Occupational Aspirations of Iowa Farm Parents for Their Older Child." Canadian Home Economics Association Conference, Edmonton, Alberta, Canada.
- 1981 • Hira, T. K., and G. Bivens. "Consumer Travel Patterns in Rural Iowa." Canadian Home Economics Association, Toronto, Ontario, Canada.

State

- 2001 • Hira, T. K. "Successful Financial Planning for Women Business Owners." Cherokee, Iowa.
- 1993 • Helgersen, N., A. M. Fanslow, and T. K. Hira. "Economic Profile of Iowa Money Manager Over Time (1982–1991)." Iowa Home Economics Association, Des Moines, Iowa.
- 1990 • Hira, T. K., and U. Sumarwan. "Determinants of Satisfaction with Household Financial Status." Annual conference of Iowa Home Economics Association, Cedar Rapids, Iowa.
- 1989 • Hira, T. K., and C. Brinkman. "The Influence of Socio-Demographic Characteristics and Knowledge About Loans on Student Debt." Annual conference of Iowa Home Economics Association, Ames, Iowa.
- 1989 • Hira, T. K. "Factors Causing Debt Problems Among Scottish Families." Annual conference of Iowa Home Economics Association, Ames, Iowa.
- 1988 • Hira, T. K. "Money Management Practices of Japanese Households." Annual conference of Iowa Home Economics Association, Coralville, Iowa.
- 1986 • Hira, T. K. "Financial Planning Advice! Who Is Using It?" Annual conference of Iowa Home Economics Association, Waterloo, Iowa.

**Presentations to
the Iowa State
University and Ames
communities**

- 2004 • Hira T.K. "The Role of Professional Societies in Building Future Leaders" Family and Consumer Science 206. Sept. 22
- 2003 • Hira, T. K. "Family and Consumer Sciences and Global Economy: Critical Issues Facing Families and Individuals." Family and Consumer Education Studies (FCES 521/421), Iowa State University, January.
- 2002 • Hira, T. K. "Role of Student Leaders in the Success of Professional Societies." Family and Consumer Education Studies student club meeting, Iowa State University.
- 2002 • Hira, T. K. "Women and Leadership in a Global Environment," Women in Development lecture series, Carrie Chapman Catt Center for Women and Politics, Iowa State University.
- 2002 • Hira, T. K. "Social Gambling and Bankruptcy: Is There a Connection?" Ames chapter of the American Society of Women Accountants.
- 2001 • Hira, T. K. "Critical Economic Issues Facing Individuals and Families." International Perspectives in Family and Consumer Sciences (FCEDS 421/521).
- 2001 • Hira, T. K. "Leadership in Family and Consumer Sciences." Foundations of Family and Consumer Sciences (FCEDS 160).
- 2000 • Hira, T. K. "Narrative Therapy and Problem Gambling," Iowa

Communications Network, Drake University, Des Moines, Iowa.

- 2000 • Hira, T. K. "Role of Women in the New Millennium." Leadership seminar by Young Women's Christian Association.
- 1999 • Hira, T. K. "Spending and Saving Approach for Young Adults—To Plan for Retirement." Beta Alpha Psi accounting honor society, Iowa State University College of Business.
- 1998 • Hira, T. K. "Gambling in Iowa: Implications for Families and Children." United Methodist Church, Ames, Iowa.
- 1998 • Hira, T. K. "Financial Planning Strategies for Graduating Seniors." Iowa State University College of Design.
- 1997 • Hira, T. K. "Retirement Planning: Role of Social Security and IPERS." Mary Greeley Medical Center, Ames, Iowa.
- 1997 • Hira, T. K. "Financial Planning for Your Future." Mary Greeley Medical Center, Ames, Iowa.
- 1997 • Hira, T. K. "Financial Planning for Women: Capturing Their Strengths of Planning for their Specific Needs." Iowa State University Women's Center.
- 1996 • Hira, T. K. "Financial Planning Specifics for New Graduates." Iowa State University College of Design.
- 1996 • Hira, T. K. "Financial Planning Essentials for Graduating Seniors." Iowa State University Department of Chemical Engineering.
- 1996 • Hira, T. K. "Essentials of Financial Planning for Young Professionals." Farm House fraternity, Iowa State University.
- 1996 • Hira, T. K. "ISU Benefit Plans: How To Select an Option To Meet Your Family Needs and Your Pocket." Iowa State University Colleges of Agriculture and Family and Consumer Sciences. (two separate presentations)
- 1996 • Hira, T. K., C. Ingram, and K. Monson. "Students and Gambling: Their Beliefs, Opinions and Behavior." Gambling conference sponsored by Iowa State University College of Family and Consumer Sciences.
- 1996 • Hira, T. K. "Gambling: Its Impact on Family Relations and Family Finances." Gambling conference sponsored by Iowa State University College of Family and Consumer Sciences.
- 1996 • Hira, T. K. "The Savings, Spending and Borrowing Behavior of Japan and U.S. Consumers." International Voices lecture series, Carrie Chapman Catt Center for Women and Politics, Iowa State University.
- 1996 • Hira, T. K. "Financial Planning for New College Graduates." A seminar sponsored by senior council of 1996 graduating class.
- 1995 • Hira, T. K. "Social-Psychological Aspects of Money Behavior." ISU

- Extension Service, Family Resource Management Field Specialist in-service training.
- 1995 • Hira, T. K. "Influence of Family Environment and Family Rules on Money Attitudes and Money Behavior." Education forum, Collegiate United Methodist Church, Ames, Iowa.
 - 1995 • Hira, T. K. "Financial Planning: Profession and Careers." Phi Kappa Phi finance honor society, Iowa State University.
 - 1995 • Hira, T. K. "Basic Approach to Financial Planning for Professional Women." Professional Cosmetology Institute, Ames, Iowa.
 - 1994 • Hira, T. K. "Mutual Fund Investment Strategies." College for Seniors, Iowa State University.
 - 1994 • Hira, T. K. "Investment for Retirement." American Association of Retired Persons (AARP)/Women's Financial Information Program, Ames, Iowa.
 - 1993 • Hira, T. K. "Characteristics, Types, and Selection of Mutual Funds." College For Seniors sponsored by the Office for Retirement Information and Planning, Iowa State University.
 - 1993 • Hira, T. K. Weeklong workshop in financial management for Family Resource Management Extension staff. Ames, Iowa.
 - 1989 • Hira, T. K. "Financial Management Today for the Future." Phi Gamma Delta, Ames, Iowa.
 - 1989 • Hira, T. K. "Money Management Principles for Today's Youth: Young People Speak Out." WOI-TV, Ames, Iowa.
 - 1988 • Hira, T. K. "Financial Planning for Professional Women." Medical Women's Association, McFarland Clinic, Ames, Iowa.
 - 1986 • Hira, T. K. "Investing for the Future." P&S Women's Conference, Ames, Iowa.
 - 1986 • Hira, T. K. "Investment Opportunities for Young Adults." Three-hour workshop presented at the 1986 Iowa 4-H Conference, Ames, Iowa.
 - 1985–1986 • Hira, T. K. "Financial Planning Strategies." Bi-weekly, open-line radio program, WOI Radio, Ames, Iowa.
 - 1984 • Hira, T. K. "Mutual Funds: An Investment Strategy." Presented as part of College Week, Iowa State University.
 - 1983–1986 • Hira, T. K. "Investing in Mutual Funds." Seminars presented as part of Iowa State University's Continuing Education Investment Planning Seminars.
 - 1983–1984 • Hira, T. K. "Family Money Management in the 80's." Invest in Yourself

series sponsored by the Office for Retirement Information and Planning, Iowa State University.

- 1982 • Hira, T. K. “Investing in Money Market Funds” and “Mutual Fund Investment Strategies.” Seminars presented as part of Iowa State University’s Financial Health seminar series.
- 1982 • Hira, T. K. “Investment Strategies for Families.” A presentation at College Week, Iowa State University.
- 1980 • Hira, T. K. “Understanding Inflation.” A presentation at College Week, Iowa State University.

Honors and Awards

International

- 1990 • Research Excellence Award of Japan Society of Household Economics
- 1989 • Certification of Recognition as a resource person for a one-week professional development training workshop by Consumer Corporate Affairs, Canada Office of the Superintendent of Bankruptcy
- 1972 • Fullbright-Hays Scholarship
- 1963 • Government of Pakistan National Merit Scholarship

National

- 2004 Distinguished Alumni Award, Alumni Association University of Missouri, Columbia
- 2004 • Award-winning paper—“Effects of Financial Education on Self-directed Financial Learning and Career Satisfaction of Lower-level, White-collar Workers”, National Endowment for Financial Education Think Tank “Motivating Americans to Develop Constructive Financial Behaviors: \$1,000 Award. Denver, May.
- 1998 • Expert witness for the United States Senate Committee on Judiciary, for revision of Consumer Bankruptcy Code, March 11, Washington, D.C.
- 1995–1998 • Member of National Expert Bank: American Association of Family and Consumer Sciences for family resource management subject matter
- 1996 • Distinguished Fellows Award, The Association for Financial Counseling and Planning Education (AFCPE)
- 1996 • Selected to participate in a 20-member national “Welfare Reform Think Tank,” The University of Georgia, Athens, Georgia
- 1995–1997 • Appointed to a three-member National Advisory Committee for AT&T’s Partners in Education Program
- 1995 • Invited to participate in a nine-member national retirement saving expert focus

group by Putnam Investment and the Cambridge Center for Behavioral Studies, Harvard University, Cambridge, Massachusetts

- 1993 • Selected as one of the 21 delegates by the American Home Economics Association to participate in a national conference, "Positioning the Profession for 21st Century," Scottsdale, Arizona
- 1991–1992 • USDA State Agricultural Experiment Station Leadership development program, class 1 scholarship awarded by the Association of Administrators in Home Economics (AAHE)
- 1987 • Expert witness for the U.S. Senate Banking Committee—policies on disclosure of interest rates on saving; need for information and consumer education, Washington, D.C.

State

- 1991 • Research Award, Iowa Home Economics Association
- 1983 • Consumer Merit Award, Iowa Consumer League

College and University

- 1998 • Strong Minded Women Award, Carrie Chapman Catt Center for Women and Politics, Iowa State University
- 1998 • ISU Wilton Park International Service Award
- 1997 • ISU Foreign Travel Grant
- 1996 • Iowa State Board of Regents Award for Faculty Excellence
- 1996 • ISU Alumni Association Faculty Citation Award for inspiring service to students and alumni
- 1996 • ISU Foreign Travel Grant
- 1994 • College of Family and Consumer Sciences International Achievement Award
- 1993 • College of Family and Consumer Sciences Research Excellence Award
- 1992 • Grace Olson Resident Instruction Award for Application of Computers in Teaching Family Financial Planning Concepts, College of Family and Consumer Sciences, \$1,000
- 1988 • ISU Foreign Travel Grant
- 1984 • ISU Foreign Travel Grant

Research Awards Won by Advisees

- 1996 • Iowa State University Research Excellence Award for the dissertation "Older adults, bequests, and wills" (M. Goetting)

- 1990 • Iowa Home Economics Student Research Paper Award for the M.S. thesis “A managerial system’s approach to factors influencing satisfaction with households’ financial status” (U. Sumarwan)
- 1990 • Association of Financial Counseling and Planning Education student paper award for M.S. thesis, “Insurance knowledge and coverage: Determinants of satisfaction with preparation for financial emergencies” (R. Vogelsang)
- 1984 • Southeastern Regional Family Economics’ Best Thesis Award for “Managerial systems approach to money management practices influencing household solvency status” (J. Mueller)

Offices Held and Committee Memberships in Professional Organizations

Regional, National, and International

- 2003–2006 • Development Committee, American Association of Family and Consumer Sciences • *Member*
- 2003–2004 • Grants Committee of the American Association of Family and Consumer Sciences • *Member*
- 2001–2002 • American Association of Family and Consumer Sciences • *President*
- 2000–2001 • American Association of Family and Consumer Sciences • *President Elect*
- 1998–2000 • Investment Committee, American Association of Family and Consumer Sciences • *Chair*
- 1996–1998 • Vice President Finance and Properties, American Association of Family and Consumer Sciences • *Chair*
- 1994–1997 • Board of Directors: Women’s Market Share Newsletter—Bi-monthly • *Member*
- 1995–1996 • Critical Issues: American Association of Family and Consumer Sciences • *Member*
- 1993–1996 • Commission on Savings and Investment in America (founding member of the board) • *Member*
- 1993–1995 • Association for Financial Counseling and Planning Education • *Executive Director*
- 1993–1994 • Committee on Professional Development and Capacity Building, American Home Economics Association • *Member*
- 1993–1994 • Board of Directors, The Institute of Certified Financial Planners • *Director at Large*
- 1993–1997 • Board of Directors, National Foundation for Consumer Credit • *Member*
- 1993–1994 • Professional Development and Capacity Building Committee, American Home Economics Association • *Member*

- 1992–1993 • National Committee on Professional Development, Institute of the Certified Planners • *Member*
- 1992–1994 • National Council on Consumer Education, AT&T, Consumer Credit Education Fund Advisory Board • *Member*
- 1992–1993 • International Board of Standards and Practices for Certified Financial Planners, Cash Flow Budget Analysis Task Force • *Member*
- 1992–1993 • Program Committee, National Conference of the Association of Financial Counseling and Planning Education • *Member*
- 1991–1993 • Family Economics and Home Management Section, American Home Economics Association • *Chair*
- 1991–1992 • Family Economics and Home Management Section, American Home Economics Association • *Chair Elect*
- 1991 • National Conference Planning Committee, Association of Financial Counseling and Planning Education • *Chair*
- 1990–1991 • North Central Regional Research Group—Family Economic Well-Being, NC 182 Regional • *Chair*
- 1990–1991 • National Advisory Council on Financial Planning for the Institute of Certified Financial Planners • *Member*
- 1990–1991 • Honorary Advisory Committee, American Association of Parents and Children • *Member*
- 1988–1990 • Association of Financial Counseling and Planning Education: Committee on National Certification of Credit Counselors • *Member*
- 1987–1990 • International Association for Financial Planning: Academic Resource Council • *Member*
- 1987–1989 • Board of Examiners—International Board Standards and Practices for Certified Financial Planners • *Member*
- 1987 • Board of Examiners for the Certified Financial Planners—sub-board of International Board of Standard and Practices for Certified Financial Planners • *Chair*
- 1986–1988 • Association for Financial Counseling and Planning Education • *Past President*
- 1986–1988 • International Federation of Home Economics—American Home Economic Association Liaison Committee • *Member*
- 1985–1988 • International Board of Standards and Practices for Certified Financial Planners • *Member*
- 1984–1986 • Association for Financial Counseling and Planning Education • *Founding President*

- 1984–1986 • Long Range Strategies Planning Committee, American Home Economics Association • *Member*
- 1984–1986 • Family Resource Management Committee—a committee of International Home Economics Association • *Member*
- 1979–1980 • Consumer's Association of Canada, Speaker's Bureau • *Chair*

State of Iowa

- 2002–2005 • Iowa Workforce Development Board • *Regents' Delegate*
- 2001–2002 • Governor's Citizen's Alliance for Health Insurance, State Planning Committee • *Member*
- 1999–2001 • Iowa Supreme Court Committee on Child Support Guidelines • *Member*
- 1997–2000 • Gambling Treatment Program Advisory Committee, Iowa Department of Public Health • *Member*
- 1995–1998 • Board of Directors, Norwest Bank Community Board • *Member*
- 1992–1993 • Iowa Home Economics Association, International Committee • *Chair*
- 1988–1990 • Iowa Home Economics Association Annual Conference, Research Paper Review Committee • *Chair*
- 1988–1990 • Iowa Home Economics Association, Student Member Section • *Advisor*
- 1985–1987 • Iowa Home Economics Association, International Committee • *Member*
- 1981–1983 • Iowa Home Economics Association, Family Economics and Management Section • *Member*

Ames Community

- 2003–Present • Ames Noon Rotary • *Member*
- 2003–2006 • Habitat for Humanity Central Iowa Board • *Member*
- 2003–2004 • Story County Habitat for Humanity • *Family Advocate*
- 2002–2005 • Ames Chamber of Commerce Board • *Member*

Membership in Professional and Honor Societies

- International Federation of Home Economics
 - American Association of Family and Consumer Sciences
 - Iowa Association of Family and Consumer Sciences
 - Phi Epsilon Omicron, Honor Society in Home Economics
 - Gamma Sigma Delta, Honor Society in Agricultural Economics

- Epsilon Sigma Phi, Extension Honor's Society

Major Fields of Research and Teaching Interests

Research

- Impact of employer-provided financial education on employee financial well-being and loyalty
- Consumer bankruptcy and consumer credit
- Gambling and bankruptcy
- Financial beliefs and behaviors

Teaching

- Family Financial Management (introductory and advanced courses)
- Consumer Behavior; Financial Planning and Counseling

Research Grants and Projects Funded

Extramural Support

- 2004 Hira, Tahira K., Swenson David and Anderson Diane, "Socioeconomic Effects of Gambling in Iowa." Iowa General Assembly, September, \$90,000; (Under review)
- 2004 Hira, Tahira K. and Caezilia Loibl, "Understanding significant factors that explain differences in investment behavior." National Association of Security Dealers (NASD) Investor Education Foundation, July. \$95,000; (Under review)
- 1998–2001 • Hira, T. K. "Impact of financial planning education on employee satisfaction and productivity," Ernst and Young, LLP, \$123,000.
- 1997–1998 • Hira, T. K. "Evaluation of the progress of 'seek employment' participants in gaining job skills and movement toward self sufficiency," Bureau of Collection, Iowa Department of Human Services, \$261,210.
- 1996–1997 • Hira, T. K. "Evaluation of the progress of 'seek employment' participants in gaining job skills and movement toward self sufficiency," Bureau of Collection, Iowa Department of Human Services, \$256,922.
- 1995–1996 • Hira, T., S. Garasky, and A. Fanslow (consultant). "Evaluation of review and adjustment (REVAD) participants movement toward the progress of self sufficiency," Iowa Department of Human Service, \$264,179.
- 1993–1995 • Hira, T. K. "Investigating differences in bankruptcy circumstances and consequences for petitioners filing under Chapter 7 vs. Chapter 13," National Conference of Bankruptcy Judges (NCBJ) Endowment for Education, \$55,177.
- 1990–1991 • Hira, T. K. "Program review and regional research evaluation," Cooperative State Research Services (CSRS), USDA, \$24,946.
- 1990–1991 • Hira, T. K. "Theses and dissertations in home economics," Research Section

of American Home Economics Association, \$1,500.

- 1990–1991 • Hira, T. K. “Socio-economic characteristics of consumers in default and evaluation of rehabilitation process through bankruptcy: A comparison between United States and Canada,” Award by Canadian Studies Grant Program, \$3,000.
- 1987 • Hira, T. K. “Instructional grant to introduce computers in Family Financial Planning Course (FE 483),” Century Company of American, computer and printer (\$3,000) and Confidential Planning Service, Inc., financial planning software “pro-plan” (\$4,795), total \$7,795.
- 1987–1990 • Hira, T. K., and S. Ueda. “An international survey of causes and effects of consumer bankruptcy,” Labor Saving Banks’ Association, Japan, \$124,000 (of the total grant, \$65,729 was brought to ISU).
- 1987 • Hira, T. K. “Multiple debt problems of Scottish families,” Scottish Association of Citizen Advice Bureau, Edinburgh, Scotland, \$3,500.
- 1986 • Hira, T. K., and S. Nagashima. “Financial management practices of Japanese households,” Nara Women’s University, Nara City, Japan, \$3,000.
- 1982 • Bivens, G., M. Winter, T. K. Hira, and C. Volker. “Update of standard of need for Iowa aid to dependent children recipient,” Department of Social Services, Des Moines, Iowa, \$7,076 (part of a four-member team).
- 1979 • Hira, T. K. “A study of small debtor program in Manitoba, Canada,” University of Manitoba, \$1,800.
- 1979 • Hira, T. K. “Importance of family financial counseling in today’s credit society,” Federal Government of Canada, Summer Youth Employment Grant for the preparation of sound-slide presentation, \$10,000.

Intramural Support

- 2000–2002 • Hira, T. K. “Financial management for employers of small manufacturing companies,” Iowa Manufacturing Extension Partnership, \$30,000.
- 1999–2000 • Hira, T. K. “Satisfaction with retirement planning advice among ISU retirees,” Office of Business and Finance, ISU, \$32,500.
- 1998–2001 • Hira, T. K. “Explaining the origin of financial beliefs and behaviors of modern families,” Iowa Agriculture and Home Economics Experiment Station (IAHEES), \$70,981.
- 1997 • Hira, T. K. “Site visit grant to develop study-abroad and faculty-exchange programs,” Iowa State University Study Abroad Center, Site Visit Grant/Travel Grant, \$2,799.
- 1997 • Hira T. K. “Faculty/study abroad exchange,” College of Family and Consumer Sciences—Julia F. Anderson Grant, Anderson International Funds, \$400.
- 1997 • Hira, T. K. “Gambling and the bankruptcy connection,” College of Family

and Consumer Sciences, \$6,630.

- 1997 • Enders, L., and T. K. Hira. "The impact of gambling on relationships," College of Family and Consumer Sciences, \$1,200.
- 1996 • Hira, T. K. "Impact of gambling on financial status of college students," College of Family and Consumer Sciences, \$1,280.
- 1996 • Hira, T. K. "Gambling: A family financial crisis: Role of credit counseling," Iowa Home Economics Experiment Station, \$2,660.
- 1993–1996 • Hira, T. K. "The correlates of financial problems among families in financial counseling," ISU Agricultural and Home Economics Experiment Station, \$30,000.
- 1992 • University Foreign Travel Grant to present two research papers at International Federation of Home Economics Congress, Hanover, Germany, July, \$1,250.
- 1992 • Garasky, S., and T. K. Hira. "Analyzing economic stress on families from consumer credit," CFCS Grace Olson Endowment Fund, \$2,700.
- 1991 • Fanslow, A. M., and T. K. Hira. "Financial management practices of household money managers: A longitudinal study," total \$11,000 (Iowa State University Agricultural and Home Economics Experiment Station—\$6,950, Human Development and Family Studies—\$2,000, Family and Consumer Sciences Education—\$300, Graduate College—\$1,000, Family and Consumer Sciences Research Institute—\$750).
- 1986–1990 • Hira, T. K. "Determinants of household economic well-being," regional project team member, Home Economics Research Institute and Iowa Agricultural and Home Economics Experiment Station, \$11,000.
- 1988 • Hira, T. K. "International research conference on consumer bankruptcies," \$2,066 (Julia F. Anderson International Fund CFCS—\$400, International Affairs office—\$1,666).
- 1986 • Fanslow, A., and T. K. Hira. "Financial management competencies of household money managers: Bases for adult education," total \$10,500 (Iowa State University Agricultural and Home Economics Experiment Station—\$4,000, Home Economics Development Fund—\$4,000, Graduate College—\$1,000, Home Economics Education Developing Fund—\$1,500).
- 1986 • University Travel Grant to participate in the International Bankruptcy Research Project, Osaka, Japan, June, \$1,500.
- 1985 • Hira, T. K., and H. Van Auken. "Business practices of certified financial planners," Iowa State University Graduate College, \$600.
- 1984 • Hira, T. K. "Financial planning/counseling consortium," Home Economics Development Fund, Iowa State University, \$3,500.
- 1984 • University Travel Grant to present a research paper to International

Federation of Home Economics Congress, Oslo, Norway, July, \$1,150.

- 1984 • Hira, T. K., H. Van Auken, and D. Norris. "Certified financial planners: Their services and products," National survey, Iowa State Graduate College, \$1,500.
- 1984 • Hira, T. K. "Characteristics of bankruptcy chapter 13 debtors in five states," Iowa State University Graduate College, \$500.
- 1983 • Hira, T. K. "Measurement of money management knowledge of college students," Home Economics Research Institute, \$220.
- 1982 • Hira, T. K. "Evaluation of bankruptcy process in Iowa," Iowa State University Graduate College Mini-Grant, \$500.
- 1982 • Hira, T. K. "Determinants of household solvency status," Iowa State University Research Grants Program, \$6,700.

Other Professional Activities

Editorial

- 1999–Present • *Practical Estate Planning*
- 1996–1998 • *Journal of Financial Planning, Member of Editorial Advisory Board*
- 1995–1997 • *Women's Market Share*
- 1995–1998 • *Advancing Consumer Interest*
- 1990–1995 • *Financial Counseling Planning Journal*
- 1989–1995 • *Family Perspective*
- 1987–1992 • *Journal of Financial Planning*
- 1987–1993 • *Journal of Family and Economic Issues*

Reviewer

- 2001–Present • *International Journal of Consumer Studies*
- 1998–Present • *Financial Counseling and Planning Journal*
- 1998–2001 • *Advancing Consumer Interest*
- 1991–2003 • *Journal of Consumer Affairs*
- 1996–2005 • *Journal of Family and Consumer Sciences*
- 1993–2002 • *Journal of Family and Economic Issues*
- 1995 • North Atlantic Treaty Organization (NATO), Scientific and Environmental Affairs Division - Collaborative Research Grant
- 1995 • Thematic issue focused on Asian households for the *Journal of Family and Economic Issues*

- 1992–1993 • *Rural Sociology*
- 1987–1990 • *Home Economics Research Journal*
- 1985 • Social sciences and humanities grant proposals, Research Council of Canada, Ottawa, Canada
- 1984–1993 • *American Home Economics Journal*
- 1984–1989 • *Family Perspectives*

Consulting

- 1998–2002 • Zayad Women's University, United Arab Emirates. Development of family economics curriculum for Family and Consumer Sciences College. Dubai, UAE.
- 1998 • Citicorp: Credit Card Services. Understanding and communicating with the overextended card member to prevent delinquencies and bankruptcies. Kansas City, Missouri.
- 1997 • College of Human Ecology, University of Putra Malaysia. Development of research and teaching program in family financial planning (summer). K. L. Malaysia.
- 1997 • Citibank Recovery Unit. A move from debt collector to financial advisor. Kansas City, Kansas.
- 1996 • Citibank Credit Department. Understanding predictors of consumer delinquencies and consumer bankruptcies. New York, New York.
- 1996 • Department of Resource Management and Consumer Studies. Universiti Pertanian Malaysia. Development of undergraduate financial management curriculum. K. L. Malaysia.
- 1995 • Japan Consumer Finance Association. Development of financial counseling centers and training of financial counselors. Tokyo and Osaka, Japan.
- 1989 • Consumer and Corporate Affairs Canada, Bankruptcy Branch. Development of proposal for major policy change in bankruptcy procedures. Toronto, Ottawa, Canada.
- 1989 • University of Minnesota, Department of Family Services. Evaluation of curriculum to develop a focus on financial counseling. St. Paul, Minnesota.
- 1983–1986 • Aid Association for Lutherans. Developing research directions and educational material in personal finance. Appleton, Wisconsin.

Reviewer for Research Papers at Regional and National Conferences

- 2004, 1986, 1985, 1984 • American Council on Consumer Interest annual conference (juried papers)

- 1995, 1999 • Eastern Family Economics and Resource Management Association's annual conference (juried paper)
- 1993 • Massachusetts Avenue Building Assets Fund grant proposals for American Home Economics Association
- 1987, 1986, 1983 • Association for Financial Counseling and Planning Education's annual conference (juried paper)
- 1989, 1990 • Association for Financial Counseling and Planning Education's annual conference (student paper awards)
- 1985, 1986, 1989 • Home Economics Association's annual conference (research abstracts, student award papers, and research excellence awards for Iowa)
- 1989, 1986, 1985 • Family Economics and Home Management research sections at the annual conference of American Home Economics Association (juried papers)
- 1985 • Family Economics and Home Management sections pre-conference at American Home Economics Association's annual conference (juried papers)

Participation in Program Review

- 2001 • Member of the review committee for the comprehensive review of the Home Economics Department, Institute of Food and Agriculture Services, University of Florida, Gainesville, Florida.
- 1992 • Member of the review committee for the comprehensive review of the Department of Family Resource Management at Ohio State University, Columbus, Ohio.
- 1991 • Member of the review committee for the comprehensive review of the Home Economics Department, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, Florida.
- 1991 • Coordinator, CSRS-USDA program review team, Department of Home Economics, University of Arkansas, Pine Bluff, Arkansas.
- 1991 • Coordinator, CSRS-USDA program review team, College of Home Economics, University of Nebraska-Lincoln, Nebraska.
- 1990 • Member of CSRS-USDA review team, College of Home Economics, University of Kentucky, Lexington, Kentucky.

Citations in Regional/National/International Media Selected List

- | | |
|------------------------------|------------------------------|
| • <i>Business Monthly</i> | <i>National Public Radio</i> |
| • CBS Up To The Minute Show | NBC Today Show |
| • <i>Cedar Rapid Gazette</i> | <i>New York Times</i> |
| • <i>CFP Today</i> | <i>Nippon Deizai Shinbun</i> |
| • <i>Chicago Tribune</i> | <i>Omaha Herald</i> |

- *Christian Science Monitor*
- *CNN News*
- *Des Moines Register*
- *Hattiesburg American*
- *Lincoln Journal Star*
- *Modern Maturity*
- *National Newsletter*
- *Money Magazine*
- Parenting*
- The Otago Daily Tribune*
- The Tennessean*
- Wall Street Journal*
- Washington Post*
- Women's Market Share-*
- Your Money*

Students Supervised

Doctoral Degrees Completed

- 2001 • Bryan Miller, "Early family experiences and the financial behavior of college students: The impact of gender and gambling," co-chair
- 1996 • Laurie Stange, "The symbolic meaning of earned income and the division of household labor"
- 1996 • Marsha Goetting, "Older adults, bequests, and wills," co-chair
- 1993 • Ujang Sumarwan, "Application of consumer behavior model to credit behavior among high and low risk borrowers"
- 1993 • M. Justice, "The evolution of the narrative metaphor when chemical dependency is in the dominant plot," co-chair
- 1990 • Mary E. Garrison, "The effects of daily hassles, reported managerial behavior, family adaptability and cohesion of family health"
- 1989 • Tracy Todd, "Becoming isomorphic: A model for family therapy," co-chair
- 1988 • Olive M. Mugenda, "Socioeconomic and process variables influencing households' satisfaction with future plans, financial status, and quality of life"

Postdoctoral Fellow

- 2003–2004 • Connie Post, professor/mentor for the Shared Leadership Institutional Change (SLIC)
- 2002–2003 • Caezillia Loibl, Technische Universitaet Muenchen, Germany
- 1987–1988 • Jane Schuchardt, Iowa State University

Master's Degrees Completed

- 2000 • Madhumita Bannerjee, "A family resource management approach to retirement planning and its impact on satisfaction with finances"
- 1997 • Kyra Monson, "Social learning perspective of gambling behavior"
- 1995 • Kyle L. Kostecky, "A family resource management approach to satisfaction with personal life and financial situation in retirement"
- 1993 • Sandra McKinnon, "Satisfaction with family financial situation of financial

managers in single-parent and married-couple families with children”

- 1992 • T. J. Dufresne, “Bankrupts’ decision-making and coping processes of Canadian, Scottish, and United States bankrupts: An application of the double ABCX model of family adaptation to families who have experienced financial stress”
- 1991 • Heeseon Noh, “The effects of consumer credit use on financial difficulties and satisfaction with overall quality of life”
- 1990 • Nancy Wolff, “Factors influencing the level of household savings”
- 1990 • Renate Vogelsang, “Insurance knowledge and coverage: Determinants of satisfaction with preparation for financial emergencies”
- 1990 • Ujang Sumarwan, “A managerial systems approach to determining factors influencing satisfaction with household financial status”
- 1989 • Carla Brinkman, “The influence of socio-demographic characteristics and knowledge about loans on student debt”
- 1988 • Cynthia Wasberg, “Reasons for the use of credit and their influence on change in household’s debt burden”
- 1986 • Bill Scheideler, “Factors contributing to successful completion of bankruptcy Chapter 13 program”
- 1986 • Linda Ohrt, “Assessing the determinants of differences in satisfaction and money management practices of dual- and single-earner couples”
- 1984 • Anne Swift, “A systems approach to communication patterns influencing household solvency status”
- 1983 • Jan Mueller, “A managerial systems approach to money management practices influencing household solvency status”
- 1983 • Olive Mugenda, “Evaluation of bankruptcy process in Iowa”
- 1982 • Ardys Ulrichson, “Analysis of the effect of legal regulations on the profile and rate of Iowa bankruptcies”

**Undergraduate
Student Supervision**

- 2004–2005 • Mentor for Freshman Honors Seminar (Margaret Storm)
- 2002–2003 • Mentor for Freshman Honors Student (Lyndsey Larson)
- 1999–2000 • Mentor for Freshman Honors Student (Gina Hertz)
- 1999–2000 • Mentor for McNair Scholar (Chone Phiathep)
- 1998–1999 • Supervise Undergraduate Honors Project (Heidsha Batista)
- 1997–1998 • Mentor for McNair Scholar (Robin Smith)

1996–1997 • Supervise Undergraduate Honors Project (K. Peterson)

1997–1998 • Supervisor for Undergraduate Research Assistants

Member of Program of Study Committees

Master's Degree

2003–2005	• Rebecca Feldman.....	Higher Education
1996–2001	• Mary Snow	Human Development and Family Studies (HDFS)
1992–1994	• Judy Strand	Business Administration
1989–1991	• Laura Luci.....	Sociology
1989–1991	• Carlett Washington	Sociology
1989–1990	• Huei-Mei Huang.....	Family Environment
1983–1986	• Andrea Hansen.....	Sociology
1981–1984	• Marta Guevera	Home Economics Education
1981–1983	• Patrice Dollar	Family Environment
1979–1981	• Christine Brew.....	Family Studies (Manitoba)
1978–1980	• Dawn Wilkinsin	Family Studies (Manitoba)

Doctoral Degree

2004–2007	Laurie Wolf	Ph.D Higher Education Leadership
2003–2006	Audrey Bowler Brown	Ph.D Curriculum & Instructional Technology
2001–2004	• Karlene Jennings	Educational Leadership and Policy Studies
1999–2002	• Linda Wild	Instructional Development, Education
1995–2002	• Dan Harkeness	Human Development Family Studies
1995–2000	• Tim Mullaney	Human Development Family Studies
1998–2000	• Tom Carlson	Human Development Family Studies
1995–1997	• Bessie Paterno.....	Statistics/Economics
1994–1997	• Jennifer Bernasek	Human Development Family Studies
1993–1998	• Tim Heinrichs	Human Development Family Studies
1992–1995	• Nancy Hilgersen	Family and Consumer Sciences Education
1989–1993	• Jeff Lashley	Human Development Family Studies
1989–1992	• David Brown	Human Development Family Studies
1989–1992	• Scott Henseley	Family Environment
1988–1993	• Linda Manikowske	Textiles and Clothing
1988–1991	• Laura Mutchler	Family Environment
1987–1991	• Scott Hanseley	Family Environment
1986–1991	• Lena Horne	Textiles and Clothing
1986–1989	• Tom Henrich	Family Environment

- 1986–1989 • Henry PothastFamily Environment
- 1986–1988 • Pat Titus.....Home Economics Education
- 1985–1988 • Bernita JacobsonFamily Environment
- 1985–1988 • Yonsuk Chung.....Home Economics Education
- 1983–1987 • Ardys Ulrichson.....Family Environment
- 1983–1986 • Beletech DeressaFamily Environment
- 1982–1985 • Jane SchuchardtFamily Environment

Departmental, College, and University Service

Departmental Service

- 1997–1998 • Curriculum Committee • *Member*
- 1995–1997 • Promotion and Tenure • *Member*
- 1995–1996 • Honors and Awards • *Chair*
- 1994–1995 • Honors and Awards • *Member*
- 1994–1997 • Graduate Admissions • *Member*
- 1994–1997 • Honors and Awards Committee • *Member*
- 1994–1995 • Promotion and Tenure Review Committee • *Alternate*
- 1992–1993 • Building Committee • *Member*
- 1991–1992 • Promotion and Tenure • *Member*
- 1990–1993 • Graduate Curriculum • *Member*
- 1989–1990 • Merger Steering Committee • *Member*
- 1988–1990 • Graduate Admissions Committee • *Member*
- 1987–1990 • Curriculum Committee • *Member*
- 1985–1986 • Promotion and Tenure • *Member*
- 1983–1985 • Curriculum Committee • *Chair*
- 1982–1983 • Family Resource Management Curriculum • *Coordinator*
- 1982–1983 • Promotion and Tenure • *Member*
- 1981–1982 • Undergraduate Student Club • *Advisor*

College Service

- 1995–1997 • Governance Document Review Committee • *Member*
- 1995–1996 • College and Alumni Award Committee • *Member*
- 1992–1993 • Dean's Evaluation Committee • *Member*
- 1990–1991 • Faculty Review Committee • *Member*
- 1989–1992 • General Graduate Studies • *Member*
- 1989–1990 • Research and Graduate Education • *Member*
- 1989–1990 • Faculty Advisory Board • *Chair*
- 1988–1990 • Iowa Home Economics Student Membership Section • *Member*
- 1988–1989 • Faculty Review Committee • *Chair*
- 1987–1989 • Faculty Review Committee • *Member*
- 1987–1989 • Faculty Advisory Board • *Member*
- 1985–1986 • Faculty Advisory Board • *Chair*
- 1984–1986 • Faculty Review Committee • *Member*
- 1984–1985 • Interdisciplinary Ad Hoc Committee • *Member*
- 1984–1985 • Outreach Visibility Committee • *Chair*
- 1984–1985 • Program Committee—Faculty Advisory Board • *Chair*
- 1983–1986 • Phi Epsilon Omicron Honor Society in Home Economics • *Advisor*
- 1983–1985 • Curriculum Committee • *Member*
- 1983–1985 • Faculty Advisory Board • *Member*
- 1981–1982 • Ad hoc Home Economics Core Committee • *Member*

University Service

- 2002-Present • Capital Project Committee
- 2002–2004 • President’s Committee on University Rankings • *Member*
- 2002–2005 • Capital Project Committee • *Member*
- 2002 • Senior Women Administrator Search Committee, Intercollegiate Athletics Department • *Member*
- 2002 • Provost’s Search Committee • *Member*
- 2002–Present • ISU Foundation • *Governor*
- 2001–2002 • Students Affairs Tuition Task Force • *Member*
- 2001–2003 • ISU Women in Philanthropy Advising Committee • *Member*
- 2001–2002 • ISU Foundation’s Development Officer—ISU Extension, Search Committee • *Member*
- 1989–2000 • Advisory Committee on the Naming of Buildings and Streets (appointed by president) • *Member*
- 2000–2001 • Associate Director of Human Resource—Benefits Search Committee • *Member*
- 2000–2001 • Advisory Committee on the Athletic Director’s Screening and Search • *Member*
- 1999–2003 • Council on International Programs • *Member*
- 1998–2003 • Audit Committee—ISU Foundation • *Member*
- 1996–2000 • Campaign Destiny—The Drive from Within subcommittee (raised \$15 million) • *Co-Chair*
- 1995–2000 • Athletic Director’s Advisory Board • *Member*
- 1995–1998 • University Benefits Committee • *Member*
- 1992–1998 • Senate Committee on University Appeals • *Member*
- 1995–1996 • Screening and Search Committee for Assistant Director of Purchasing • *Member*
- 1992–1995 • University Committee on Women • *Member*
- 1992–1995 • Iowa State University Research Park Board of Directors • *Member*
- 1993–1994 • Affirmative Action Officer Search Committee • *Chair*
- 1993–1994 • Faculty Salaries—Gender Equity Study Committee • *Member*
- 1990–1994 • Faculty Senate Committee on University Budget • *Member*
- 1991–1992 • Office of Vice President for Business and Finance Review Committee • *Member*
- 1991 • Margaret E. White Graduate Faculty Award Committee • *Member*
- 1990–1991 • Presidential Search and Screening Advisory Committee • *Member*
- 1990 • Screening Committee for Assistant Director-Social Sciences for Agriculture Experiment Station • *Member*
- 1989 • Screening Committee for Assistant Provost for Planning • *Member*
- 1988–1989 • Professional and Scientific Appeal Committee (Presidential Appointment) • *Member*
- 1987–1990 • University Budget and Strategic Planning (Senate Committee) • *Member*
- 1987–1990 • ISU Graduate Council (elected) • *Member*
- 1987–1988 • ISU Women’s Conference Steering Committee (Chair of Faculty Planning Group) • *Member*
- 1987–1988 • University Employee Benefits Program • *Member*
- 1987–1988 • Faculty-Administration Relations • *Member*
- 1987–1988 • Faculty Council • *Member*

- 1985–1986 • Faculty Governance (Presidential Appointment) • *Member*
- 1983–1985 • Asia-Iowa State University Title XII Matching Formula Strengthening Grant
 - *Member*

Vita
David A. Swenson

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Iowa State University
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Experiences

Regional Scientist/Research Scientist. Department of Economics, Iowa State University, Ames, Iowa. January 1992 to the present.

Adjunct Assistant Professor, Department of Urban and Regional Planning, The University of Iowa, 2003 to the present.

Adjunct Assistant Professor. Department of Community and Regional Planning. ISU, 1997-1999, 2003 to the present.

Public Research/Policy Consultant. July 1991 to the present. Provide consulting research, policy analysis, and project management assistance in the areas of applied economics, economic impact studies, input-output assessment, benefit-cost assessment, local government finances and tax analysis, labor force and fiscal impact modeling, and development finance. Recent projects include developing and applying economic impact methodologies to recycling industries or recycled commodities in cooperation with RW Beck in the states of Iowa, California, Delaware, Florida, Illinois, Indiana, Ohio, Rhode Island, for the United States as a whole, and for the County of Los Angeles.

Research Director. Iowa Public Policy Education Project, Department of Economics, Iowa State University, Ames, Iowa. October 1989 to June 1992.

Other Professional Experiences

- ❑ **Planning and Program Development Administrator.** Iowa Department of Agriculture and Land Stewardship, Des Moines, Iowa. January 1989 to October 1989.
- ❑ **Research Associate.** Public Policy Center, The University of Iowa, Iowa City, Iowa. July 1988 to January 1989. **Senior Researcher.** Institute of Public Affairs, Division of Continuing Education, The University of Iowa, Iowa City, Iowa. March 1986 to July 1988. **Policy Research Specialist.** Institute of Public Affairs, Division of Continuing Education, The University of Iowa, Iowa City, Iowa. April 1985 to March 1986.
- ❑ **Field Coordinator.** 65+ Rural Health Study, Center for Health Services Research, College of Medicine, University of Iowa, Iowa City, Iowa. July 1984 to March 1985.
- ❑ **Senior Research Assistant.** Center for Health Services Research, College of Medicine, University of Iowa, Iowa City, Iowa. March 1983 to July 1984.

Skills/Expertise

Regional economic analysis and impact assessment using input-output (IMPLAN), social accounting matrices (SAMs) and other econometric modeling systems; regional labor force analysis and model development; local and state government fiscal analysis and fiscal impacts; and development finance. Instructional skills in applied economic analysis to public projects and programs; input-output modeling; labor and fiscal impact model development; basic and intermediate statistics for policy analysis; public policy, governmental budgeting, and public finance; and development finance.

Recent Awards/Honors

Iowa State University Foundation Award for Outstanding Achievement in Extension or Professional Practice, Ames, Iowa. April, 2002.

RUPRI/CPAN Outstanding Award for Modeling Innovation, 2000, Community Policy Analysis Network, North American Regional Science Association Meeting, Chicago, Illinois. October 2001.

Education

- M.A. University of Iowa, 1985. Urban and Regional Planning (Emphasis: Applied Analysis and Methods)
- M.A. University of South Dakota, 1981. Political Science (Emphasis: Theory and Evolution of Governing Systems and Research Methods)
- B.S. University of South Dakota, 1979. Political Science (Emphasis: Public Administration and Planning)

Selected Papers, Reports, and Publications

Rural Jobs, Rural People, and Rural Pay in the North Central Region. (with Liesl Eathington) NCR Policy Brief, Spring 2004.

A Modern Economic Development Romance: Courting the “Creative Worker.” (with Liesl Eathington). Paper presented to the annual meeting of the Southern Regional Science Association, March 2004.

The Iowa Regional Economic Atlas. (with Liesl Eathington) Department of Economics, Iowa State University, March 2003.

The Creative Economy in Iowa. (with Liesl Eathington). Iowa Department of Cultural Affairs, February 2003.

Multiple Measures of the Role of Agriculture in Iowa’s Economy. (with Liesl Eathington) Department of Economics, Iowa State University, February, 2003.

Do Tax Increment Finance Districts Spur Growth or Squander Public Resources? Paper presented to the annual meeting of the Southern Regional Science Association, April, 2002.

An Introduction to Economic Impact Assessment. Department of Economics, Iowa State University, October 2001/February 2002.

Devolution or Convolution? The Changing Relationship Between Federal, State and Local Governments, (with Steve Deller), Journal of Regional Analysis & Policy. 31:1, 2001

Profiles: USDA Direct Payments and Grants in the United States, Fiscal & Year 2000. (with Liesl Eathington). Department of Economics, ISU, 2001. and **Profiles: Government Farm Payments and Other Government Transfer Payments in the United States.** (with Liesl Eathington) Department of Economics, ISU, 2001.

The Economic Value of Veterinary Services in Iowa and Associated Demographic Shifts (with D. Draper & R. Ross). Submitted to the Journal of the American Veterinary Medicine Association

Regional Labor Markets: The Relationship Between Industry Level Employment and In-commuting in Pennsylvania Counties, (with Martin Shields). Journal of Regional Analysis & Policy. 30:2,2000

Rural Retail Woes: Does Wal-Mart Really Matter? (with Liesl Eathington) Paper presented at the 2001 Annual meeting of the Southern Regional Science Association, Austin, TX, April, 2001.

Employment Growth in Iowa's Agricultural Commodity Processing Industries. (With Liesl Eathington). Department of Economics, ISU, 2000.

Employment Growth in Iowa's Targeted Industries, 1992-97. (with Liesl Eathington). Department of Economics, ISU, 2000.

Nonfarm Employment Change in Iowa from 1987 to 1997. (with Liesl Eathington). Department of Economics, ISU, 2000.

U.S. Nonfarm Job and Population Changes and Community Models: Rethinking the Jobs-to-Labor Force-to-Population Relationships. Paper presented at the 2000 Southern Regional Science Association, Miami, FL.

Federal Aid to State Governments and its Impact on State Revenues and State Spending: Devolution or Convolution? Paper presented to the 1999 meeting of the Southern Regional Science Association, Richmond, VA.

A Manual for Community and Fiscal Impact Modeling Systems: Practical Techniques for Building and Applying Community Models. (with Liesl Eathington). Department of Economics, Iowa State University, October, 1998.

The Efficacy of Housing Tax Abatements on Housing Starts. (with Liesl Eathington). Paper presented to the Southern Regional Science Association annual meeting, Savannah, GA, April 1998.

Linked Economic Impact, Labor Force Allocation, and Housing Development Models: Applications for Analyzing Housing Change in Rural and Urban Areas. (with Liesl Eathington). Paper presented to the Southern Regional Science Association annual meeting, Baltimore, MD, April 1997.

A Technical Report on Issues Associated with Determining Value-Added and the Economic Impacts of Recycling Industries in the United States. Paper prepared for the Northeast Recycling Council and the Council of State Governments, October 1997.

The Economics of Change in Iowa. Iowa Rural Development Quarterly, Winter 1996.

Measuring the Fiscal Impacts of Local Economic Growth. Iowa Rural Development Quarterly, Summer 1995

Manufacturing Employment Boom Benefits Iowa's Nonmetropolitan Counties. Iowa Rural Development Quarterly, Spring 1995.

Assessed and Taxable Valuation Change, Fiscal 1989-1995: Spatial and Categorical Shifts in Capital Wealth and Property Tax Capacity in Iowa. (with Garry Pshonik). Rural Development Initiative, Iowa State University, March 1996.

Analysis of Spatial Residential and Employment Patterns and the Consequences for Housing. Paper presented at the 1995 meeting of the Southern Regional Science Association, San Antonio, TX.

Rural Housing Market Response to Nonfarm Employment Growth: An Analysis of Housing Development Patterns. (with Dan Otto), International Journal of Public Administration, (20:8&9), 1997.

Changes in the Iowa Rural and Urban Property Tax Bases. Rural Development Initiative, Iowa State University, May 1995.

Jobs-Housing Balance and Regional Mobility in Rural Areas (with Dan Otto), Paper presented to the Southern Regional Social Sciences Meeting, San Antonio, TX, April 1995.

Rural-Urban Economic Linkages: Rural Policy Research Institute Methodology (with Glenn Nelson and Daniel Otto). Paper presented at the Annual Meeting of the American Agricultural Economics Association, August 1994.

A Comparison of Nonmetropolitan County Classification Methods and Their Sensitivities to Socioeconomic Factors. Paper prepared in support of the 1994 Rupri Rural Baseline Review, Rural Policy Research Institute, University of Missouri, August 1994.

1994 RUPRI Rural Baseline Review, in collaboration with the Rural Policy Research Institute, University of Missouri, 6/94.

Levels of Urbanization and Spatial Patterns as Indicators of Socio-Economic Change in Iowa. Iowa State University, 6/94.

Commuting Patterns in the Greater Des Moines Area: A Demonstration of Regional Economic Interdependence. Iowa State University, June 1994.

The Economic Implications of Alternatives to Agricultural Drainage Wells in Iowa. Iowa State University, October 1993.

Telecommunications and Economic Development in Iowa. Iowa Department of Economic Development/U.S. Economic Development Administration, July 1993.

State of the Cities 1992 Survey. League of Iowa Municipalities, September 1992.

Iowa Government Finances and Trends. Iowa Policy and Planning Data Project, Iowa State University, June 1992.

The Iowa Public Policy Issues Agenda Survey. Public Policy Education Project Report, Iowa State University, September 1991.

Iowa Health Care Policy Preferences (with Mark Edelman). Public Policy Education Project Report, Iowa State University, April 1991.

Iowa Waste Management Public Policy (with Mark Edelman). Public Policy Education Project Report, Iowa State University, February 1991.

The Iowa Public Opinion Survey on Drug, Alcohol and Substance Abuse. Public Policy Education Project Report, Iowa State University, August 1990.

The Welfare System and Barriers to Employment in Iowa (A Report to the Iowa Business Council: with T. Pogue, P. Fisher, and M. Tracy). Public Policy Center, The University of Iowa, October 1988.

A Decade of Adjustment: Economic, Social, and Political Forces Influencing Iowa Government Policy in the 1980s. Institute of Public Affairs, The University of Iowa, February 1988.

Infrastructure and Community-Economic Development Options, Programs, and Assistance: A Primer for Iowa Local Governments. Institute of Public Affairs, The University of Iowa, January 1987.

Standardized Measures of Municipal Property Tax Dependency. Institute of Public Affairs, The University of Iowa, June 1986.

Iowa Property Taxes. Institute of Public Affairs, The University of Iowa, December 1985.

Iowa Government Series Reports, Institute of Public Affairs, 1985 - 1988.

Current References:

Arne Hallam, Professor and Chair, Department of Economics, Iowa State University, Ames, IA 50011.

Maureen Kilkenny, Associate Professor of Economics, Department of Economics, Iowa State University, Ames, IA 50011.

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EXPERIENCE

- ❑ **Assistant Scientist II.** Department of Economics, Iowa State University, Ames, Iowa. August 1998 to the present.
- ❑ **Research Assistant.** Department of Economics, Iowa State University, Ames, Iowa. September 1996 to August 1998.
- ❑ **Research Assistant.** Department of Community and Regional Planning, Iowa State University, Ames, Iowa. January 1996 to May 1996.
- ❑ **Loan Officer.** Citizens National Bank, Downers Grove, Illinois. July 1989 to June 1991.

SKILLS/EXPERTISE

Regional economic analysis; regional labor force analysis and model development; data processing and analysis using geographic information systems, database, spreadsheet, and input-output modeling software; impact assessment using input-output (IMPLAN) and social accounting matrices.

EDUCATION

M.B.A., Iowa State University, 1998.
B.S. Finance, University of Illinois at Urbana-Champaign, 1989.

SELECTED PAPERS, REPORTS, AND PUBLICATIONS

The Gender Gap in Earnings of Iowa's Workers. Department of Economics, Iowa State University (ISU), April 2004.

The Iowa Regional Economic Atlas: Foundation Research and Technical Assistance for Regional Economic Development (with David Swenson). Paper presented to the annual meeting of the Southern Regional Science Association, March, 2004.

A Modern Economic Development Romance: Courting the "Creative Worker" (with David Swenson). Paper presented to the annual meeting of the Southern Regional Science Association, March, 2004.

The Creative Economy in Iowa (with David Swenson). Department of Economics, ISU, February 2003.

Information Technology Employment Growth in Iowa, 1992-2000. (with David Swenson). Department of Economics, Iowa State University (ISU), July, 2002.

Do Tax Increment Finance Districts Spur Growth or Squander Public Resources? (with David Swenson). Paper presented to the annual meeting of the Southern Regional Science Association, April, 2002.

Profiles: USDA Direct Payments and Grants in the United States, Fiscal Year 2000. (with David Swenson). Department of Economics, ISU, 2001.

Profiles: Government Farm Payments and Other Government Transfer Payments in the United States. (with David Swenson). Department of Economics, ISU, 2001.

Rural Retail Woes: Does Wal-Mart Really Matter? (with David Swenson). Paper presented at the 2001 annual meeting of the Southern Regional Science Association, Austin, TX, April, 2001.

Defining Labor Market Territories Using GIS Software. Paper presented at the 2000 annual meeting of the Southern Regional Science Association, Miami Beach, FL, April, 2000.

Employment Growth in Iowa's Agricultural Commodity Processing Industries. (with David Swenson). Department of Economics, ISU, 2000.

Employment Growth in Iowa's Targeted Industries, 1992-97. (with David Swenson). Department of Economics, ISU, 2000.

Nonfarm Employment Change in Iowa from 1987 to 1997. (with David Swenson). Department of Economics, ISU, 2000.

Spatial Patterns of Change in Iowa's Banking Industry: Using Bank Data for Local Economic Analysis. Paper presented at the 1999 annual meeting of the Southern Regional Science Association, Richmond, Virginia, April, 1999.

A Manual for Community and Fiscal Impact Modeling Systems: Practical Techniques for Building and Applying Community Models. (with David Swenson). Department of Economics, ISU, October, 1998.

The Efficacy of Housing Tax Abatements on Housing Starts. (with David Swenson). Paper presented to the Southern Regional Science Association annual meeting, Savannah, GA, April 1998.

Current References:

Arne Hallam, Professor and Chair, Department of Economics, Iowa State University, Ames, IA 50011.

Maureen Kilkenny, Associate Professor of Economics, Department of Economics, Iowa State University, Ames, IA 50011.

CURRICULUM VITAE

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I. PRESENT POSITION

Assistant Director
Administration and Proposal Development
Center for Survey Statistics and Methodology
2003-Present

II. ACTIVITIES AS ASSISTANT DIRECTOR

Consult with approximately 30 on and off-campus researchers per year on research methods and cost estimates. Direct the Center's Survey Research Services Unit, which conducts annually, 15-30 survey research projects involving mail, telephone, web, and/or face-to-face interviewing. Actively conduct research proposal searches and collaborate with other researchers in developing research and grant proposals for submission. Provide recommendations on survey research methods, procedures and questionnaire design. Administer along with the Director, Center business functions.

III. PREVIOUS PROFESSIONAL POSITIONS

Survey Director and Projects Manager, Center for Survey Statistics and Methodology (formerly ISU Statistical Laboratory), 1998-2003
Assistant Projects Manager, ISU Statistical Laboratory, 1988-1997
Interviewer Supervisor, ISU Statistical Laboratory, 1982-1988

IV. PROFESSIONAL MEMBERSHIPS AND HONORS

American Association for Public Opinion Research, Member 2001-present

Northeastern Regional Association of State Agricultural Experiment Station
Directors 2001 Award for Excellence in Recognition of Outstanding Contributions
to Northeastern Multistate Research for "Family Business Viability in Economically
Vulnerable Communities"

V. EDUCATION

BA in Sociology, University of Minnesota-Minneapolis, 1969

Additional Professional Development Activities:

“A Researcher’s Guide to Web Survey Implementation”

American Association for Polling Research Short Course, 2004

“The Psychology of Survey Response: Lessons for Questionnaire Design”

American Association for Polling Research Short Course, 2003

“Cognitive Interviewing,” International Conference on Questionnaire Development, Evaluation, and Testing Methods, 2002

“A Practical Guide to Project Management for the Survey Researcher”

American Association for Polling Research Short Course, 2002

“Designing Great Questionnaires”

American Association for Polling Research Short Course, 2001

VI. SURVEY RESEARCH COLLABORATIONS

Faculty Activity Survey	ISU Institutional Research, 1988-current
Home Bound Elderly	ISU Department of Physical Education, 1984
Extension Telephone Survey	ISU Sociology Extension, 1985
Mayo Blood Pressure Study	Mayo Clinic, 1986
Ames School Census	Ames Community Schools, 1986-1998
Rural Road Use	ISU Department of Economics, 1986
Marshalltown Follow-up Study	ISU Department of Family Finance, 1986
Career Development Placement	ISU Department of Sociology, 1986
Child Sex Offenders	ISU Department of Human Development and Family Studies, 1987
Southeast Iowa Forest Owners	ISU Department of Forestry, 1987
Iowa Craftpersons Study	ISU Department of Human Development and Family Studies, 1987
Iowa Youth and Families Study Pilot	ISU College of Family and Consumer Sciences, 1987
Energy and Heating Study	ISU Extension, 1987
Home Based Workers Study	ISU Department of Human Development and Family Studies, 1988
Adolescent School Performance	ISU Department of Child Development, 1988
Iowa Youth and Families	ISU College of Family and Consumer Sciences, 1988-1989
Ground Water Legislation	ISU Department of Economics, 1988
Iowa Land Ownership Study	ISU Department of Economics, 1988, 1993, 1998, 2003
Red Rock Farmers Survey	ISU Department of Sociology, 1989
Sustainable Agriculture	ISU Department of Sociology, 1989
Money Management Survey	ISU Department of Family Finance, 1989
Veterinary Medicine Merit and P&S Survey	ISU College of Veterinary Medicine, 1989
Birth Defect Study	University of Iowa, 1989

RDD Pesticide Control Study	University of Iowa, 1989
Cleft Palate Study	University of Iowa, 1989-1994
ISU Benefits Study	ISU Administration, 1990
Radon Awareness Study	ISU Extension, 1990
Expenditure Study	ISU Department of Human Development and Family Studies, 1990
Low Birth Weight Study	Iowa Department of Public Health, 1991
Small Business Failures	ISU Department of Textiles and Clothing, 1991
Marshalltown Money Management	ISU Department of Family Finance, 1991,
War Stress & Military Families	ISU Department of Child Development, 1991
Telephone Communications Survey	ISU Department of Telecommunications, 1991
Economic Development Organization Study	ISU Department of Sociology-Extension, 1991
Black Population of Iowa State University	ISU Department of Sociology, 1991
Farm Machinery Safety	ISU Department of Sociology, 1991
Couples Relationships & Nutrition	ISU Departments of Sociology and Nutrition, 1991
Women's Health Survey	Mayo Clinic, 1992
School Bond Survey	Ames Community Schools, 1992
Drug Abuse Survey	University of Northern Iowa, 1992
Child Care Survey	ISU Administration, 1992
ISU Diversity Survey	ISU Administration, 1992
Women's Breast Cancer Prevalence Study	Mayo Clinic, 1993, 1995
Iowa Birth Defects Study	University of Iowa, 1993-1998
ISU Daily Survey	ISU Daily, 1993
Meat Irradiation Survey	ISU Department of Economics, 1993
Iowa Flood Study	University of Northern Iowa, 1993
Estate Bankruptcy	ISU Department of Family Studies, 1993
Benefit Communication Survey	ISU Administration, 1993
Family Farm II Study	ISU Departments of Sociology & Economics, 1994
California Birth Defects Study	California Birth Defects Monitoring Program, 1994-1996
Illness Behavior Study	The University of Iowa, 1995
Sustainable Agriculture	ISU Department of Sociology, 1995
Family Owned Business Study	Extension Consortium, 1995-1997
Alumni Contributor's Survey	ISU Alumni Association, 1995
ISU Diversity Study	ISU Administration, 1995
Iowa Persian Gulf War Study	The University of Iowa, 1995-1996
ISU Daily Survey	ISU Daily, 1996
Design College Survey	ISU College of Design, 1996
NCA Accreditation Survey	North Central Accreditation Association, 1996
Medicaid Waiver Survey	Iowa Department of Health & Human Services, 1996

Ames Nutritional Program	ISU Department of Health & Human Performance, 1997
ISU Daily Follow-up Survey	ISU Daily, 1997
Voice Disorder Prevalence Study	The University of Iowa, 1997-1999
Student Alcohol Use	ISU Student Health Center, 1998
Welfare Reform and the Food Stamp Program	ISU Departments of Economics and Human
Benefits Evaluation Study	Development & Family Studies, 1998
ISU Daily Survey	ISU Department of Human Development and Family Studies, 1998
Three-Mile Watershed Survey	ISU Daily, 1998
Gender Wage Equity Survey	ISU Agronomy Extension, 1998
ISU Retirement Benefits	Iowa Workforce Development, 1998
Inside Iowa State Survey	ISU Administration, 1998
P & S Council Survey	ISU Inside Iowa State, 1998
Sny Magill Watershed Survey	ISU P&S Council, 1999
Small Business Survey	ISU Agronomy Extension, 1999
1999	ISU Department of Textiles & Clothing,
Veterinary Pathology Survey	ISU Department of Veterinary Pathology,
1999	University of Nebraska, 2000-2002
University of Nebraska Health Study (Control Selection)	Extension Consortium, 2000
Family Owned Business 2000	ISU Department of Sociology, 2000
Food Safety Survey	Iowa Department of Natural Resources,
DNR Oil Filter Use Survey	ISU Department of Human Development and Family Studies, 2000
2000	ISU Student Government, 2000
Lee County Assessment Survey	ISU College of Agriculture, 2000
Higher Education Survey	Iowa Governor's Task Force on Privacy,
College of Agriculture Survey	ISU Department of Forestry, 2001
Privacy Survey	
2000 Mark Twain Watershed Survey	
Community Housing Survey	ISU Department of Human Development and Family Studies, 2001-2002
Carrier Survey	ISU Department of Transportation and Logistics, 2001
Clinic In Every Home	University of Iowa and the Iowa
Department	Of Public Health, 2001
Odor Mitigation Study	ISU Department of Natural Resource and Ecology Management, 2001
University of Maryland Early Onset of Stroke in Women	University of Maryland, 2000-2003
Mayo Parkinson's Study	Mayo Clinic, 2002
Youth Alcohol Survey	ISU Department of Public Safety, 2002

Recreation Services Survey	ISU Department of Recreation, 2002
Emory University Stroke Study	Emory University Medical School, 2002
Inside Iowa State	ISU Inside Iowa State, 2003
Pork Producers Survey	ISU Department of Economics, 2003
Clive Survey	ISU Department of Political Science, 2003
ASA Salary Survey	American Statistical Association, 2003
Financial Education Evaluation	National Endowment for Financial Education and the University of Minnesota, 2003
Iowa Lakes Survey	ISU Department of Economics, 2003
University of Maryland Stroke Study Of Men	University of Maryland, 2003-current
Business Innovation Survey	Cambridge University and Massachusetts Institute of Technology, 2004
Community Influences in Rural Adolescent Alcohol Use	Calvin College, 2004
Iowa E-Government Research Project	ISU Department of Political Science, 2004

VII. PROFESSIONAL MEETINGS ATTENDED

Survey Field Directors Conference and Conference on Field Technologies in Survey Research, St. Petersburg, Florida, 1989.

International Conference on Measurement Errors in Surveys, Tucson, Arizona, 1990.

International Field Directors and Technologies Conference, San Diego, California, 1991.

International Field Directors and Technologies Conference, St. Petersburg, Florida, 1992.

International Field Directors and Technologies Conference, Chicago, Illinois, 1993.

International Field Directors and Technologies Conference, Boston, Massachusetts, 1994

International Field Directors and Technologies Conference, Norfolk, Virginia, 1997

International Field Directors and Technologies Conference, St. Louis, Missouri, 1998

International Field Directors and Technologies Conference, Clearwater Beach, Florida, 1999

American Association for Public Opinion Research (AAPOR), Clearwater Beach, Florida, 1999

Gallop Symposium on Web-Surveys, Lincoln, Nebraska, 2000

American Association for Public Opinion Research, Montreal, Canada, 2001

International Field Directors and Technologies Conference, Montreal Canada, 2001

International Conference on Questionnaire Development, Evaluation, and Testing Methods, Charleston, South Carolina, 2002

International Field Directors and Technologies Conference, Clearwater Beach, Florida, 2002

American Association for Public Opinion Research Conference, Nashville, Tennessee, 2003

American Association for Public Opinion Research Conference, Tempe, Arizona, 2004

International Field Director's and Technologies Conference, Phoenix, Arizona, 2004

VIII. PRESENTATIONS

- “Interviewer Training for the Small Shop”, presentation at International Field Directors and Technologies Conference, Boston, Massachusetts, 1994.
- “Monitoring Computer-Assisted Telephone Interviewing (CATI) Studies”, presentation at International Field Directors and Technologies Conference, Norfolk, Virginia, 1997.
- “Panel Maintenance for Longitudinal Studies”, panel facilitator, International Field Directors and Technologies Conference, St. Louis, Missouri, 1998.
- Guest Lecturer for Human Development and Family Studies 269 Research Methods, Iowa State University, Ames, Iowa, 1998.
- Guest Lecturer, Statistics 521 Survey Research Methods and Sampling, Iowa State University, Ames, Iowa, 1998.
- “Welfare Reform Panel Maintenance”, panel member, American Association for Public Opinion Research Conference, Clearwater Beach, Florida, 1999.
- “Survey Questionnaire Design”, discussion leader, International Field Directors and Technologies Conference, Clearwater Beach, Florida, 1999.
- Guest Lecturer, Statistics 521 Survey Research Methods and Sampling, Iowa State University, Ames, Iowa, 1999.
- Guest Lecturer for Human Development and Family Studies 269 Research Methods, Iowa State University, Ames, Iowa, 2000.
- Guest Lecturer, Statistics 521 Survey Research Methods and Sampling, Iowa State University, Ames, Iowa, 2000.
- “Comparing Response Rates for Mail and Web Surveys,” panel member, International Field Directors and Technologies Conference, Montreal, Canada, 2001.
- “RDD Response Rates,” panel facilitator, International Field Directors and Technologies Conference, Clearwater Beach, Florida, 2002.
- Guest Lecturer for Human Development and Family Studies 269 Research Methods, Iowa State University, Ames, Iowa, 2002.
- Guest Lecturer for Community and Regional Planning Research Methods, Iowa State University, 2002.
- Guest Lecturer for Sociology 201 Research Methods, Iowa State University, 2003.
- “Research Collaborations at Iowa State University,” presentation, International Field Directors and Technologies Conference, 2004.

IX. PUBLISHED ARTICLES

- Doebbeling, B.N., Jones, M.F., Hall, D.B., Clarke, W.R., Woolson, R.F., Torner, J.C., Burmeister, L.F., Snyders-Crumley, T., Barrett, D.H., Falter, K.H., Merchant, J.A., Nusser, S.M., Anderson, D.G., Schwartz, D.A., “Methodologic issues in a population-based health survey of Gulf War veterans,” Journal of Clinical Epidemiology, 55 (2002) 477-487.

(Relevant Research Example)

**A Social Learning Perspective of Gambling Behavior Among
College Students**

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Abstract

A Social Learning Perspective of Gambling Behavior Among College Students

This study assesses what proportion of college students gamble and what the level of their gambling involvement is (i.e. frequency, scope, expenditure). In addition, a better understanding is sought of what motivated students to gamble and what factors contributed to their gambling behavior. The data was collected in the fall of 1996 from 797 undergraduate students. Main outcome measures included students' gambling status, scope, frequency, and expenditure. Predictor variables were gender, age, employment status, grade point average, and gambling expenditure of respondents' mother, father, and friend. Frequency and cross-tabulation analyses were used to develop respondents' demographic profile and to describe differences between characteristics of gamblers and non gamblers. Gamma statistics were used to test the strength of the relationship between various predictor and outcome variables. Over half of the students gambled where the two most frequently identified gambling activities were lottery and non-casino cards. The majority of them said they gambled for entertainment. On average, they gambled 3 times and spent \$33 per month. However, about 19% of them gambled 3-6 times and spent over \$66 a month on gambling. Student gambling was found to be positively related to both the gambling of their parents and the gambling of their best friend.

A Social Learning Perspective of Gambling Behavior Among College Students

Introduction

Many adult actions can be attributed to the environment in which the individual was raised. People learn how to behave by watching how their parents and other important people in their lives behave. Social learning theory states that “observational learning” also called “modeling” shapes behavior including socially undesirable behaviors. In addition, individuals are more likely to model those people whom they value, i.e. parents and friends (Bandura, 1977).

According to this theory, a relationship should exist between the gambling behavior of college students and the gambling behavior of their parents. Most of the past studies addressing this relationship focus on the connection between problem gambling among parents and students. Lesieur et al. (1991) found that 88% of their sample of college students had gambled sometime in the past, 15% were considered to be problem gamblers, and 5.5% were categorized as pathological gamblers. Signs of pathological gambling were significantly more prevalent among students who reported having compulsive gambling parents (18.8%) than those without compulsive gambling parents (4.7%). Winters et al. (1993) also divided their sample of 702 late adolescents into three severity categories based on their responses--no problem (74.2%), at-risk gambling (17.1%), and problem gambling (1.6%). Larger proportions of the problem gambling (8.7%) and at-risk gambling (65.8%) groups reported that one or both of their parents gambled as compared with the no problem group (51.8%). Govoni et al. (1996) recruited 965 high school students aged 14 to 19 to participate in a study of gambling behaviors. Again, these students were divided into an at-risk gambling group (16.7%) and a problem gambling group (10.3%). The rate of problem

and at-risk gambling was almost twice as great among adolescents who stated that their parents gambled excessively.

Parents are not the only influential individuals in the lives of college when considering gambling behaviors. Peers are thought to exert a significant influence on the behavior of young people. Though this is an area that has been largely overlooked in the gambling literature, peer influence has been examined in conjunction with a number of other behaviors. Friends have been shown to influence the alcohol consumption of college students. Fromme and Ruela (1994) studied the drinking patterns of 168 undergraduates from a mid-Atlantic university. They surveyed both students and their friends and found that a strong positive correlation existed between their drinking behavior. Van Roosmalen and McDaniel (1989) studied the association between the smoking behavior of adolescents and their peers. They found that the majority of students reported themselves as smokers when their best friend smoked regularly. Finally, one gambling study that did investigate a relationship between peer gambling and student gambling found a correlation existed. Browne and Brown (1993) surveyed 288 university students and their lottery play. They found that the students whose friends gambled more often had higher means of frequency of play themselves. The same trend was found for lottery expenditures by students and their friends.

The purpose of this current study is to explore general gambling behavior among college students. First, this study will assess how often the respondents participate in gambling, how much money they spend gambling, how many different types of gambling activities they participate in, and which activities are most popular among college students. In addition, a better understanding is sought of what motivates individuals to gamble at any level and what factors contribute to their gambling behavior. Particular attention will be paid

to parental and peer gambling behaviors and their relationship to student gambling. Social learning theory suggests that the gambling behavior of significant others could have an impact on the gambling behavior of students.

Methodology

Sample and Data Collection

The data was collected in the fall of 1996 from a non-random sample of 797 undergraduate students in introductory Economics and Human Development and Family Studies classes at Iowa State University (ISU). The three-page questionnaires used to collect data included a mix of open and closed ended questions. At ISU all studies involving human subjects have to be approved by a university committee. One of the requirements of this approval is that participants be clearly informed that their participation is voluntary. However, none of the students declined participation.

Review of existing studies provided support for following variables as predictors of gambling behavior: gender, employment status, grade point average, and an environment conducive to gambling. The gambling environment in this study was measured by the level of gambling among the respondents' parents and best friend. Specifically, it was measured by the respondents' best estimate of amount of money their mother, father and best friend spent on gambling.

Slightly over half of the respondents (50.9%) were male. The vast majority were Caucasian (90.6%). Respondents of Asian descent made up 3.7% of the sample, 2.6% were African American, and the remaining 3.0% were of Native American, Spanish, or other descent. The breakdown of the sample by student status was as follows: freshman (7.7%), sophomore (41.8%), junior (32.6%), senior (17.5%), and graduate (.4%). The majority of the respondents were employed part-time (52.0%), while 41.9% were students only/not

employed and 6.1% were employed full-time. In addition, the mean college grade point average of the group was 2.93 on a four-point scale. These characteristics are presented in Table 1.

[Insert Table 1 here]

For the purpose of cross-tabulation, data on all three gambling expenditure variables (gambling expenditure of the mother, father and best friend) were grouped into the following categories: 0 = \$0 spent (non-gambler), 1 = \$1-25 spent, 2 = \$26-100 spent, and 3 = over \$100 spent.

Respondents were presented with six types of gambling activities. They were asked to indicate how many times per month they had participated in each activity in the past year. An overall frequency of gambling variable was created by summing these numbers. For example, if a respondent bought lottery tickets three times a month, visited a casino for gambling twice a month, and bet on sports events five times a month, his frequency of gambling score would be ten.

Respondents were asked to indicate how much money they spent on each gambling occasion for each type of activity. An overall gambling expenditure variable was created by multiplying the money spent per occasion of gambling by the frequency of gambling for each type of activity. These amounts were then summed to arrive at the total gambling expenditure.

To measure the scope of gambling respondents checked all of the gambling activities they participated in within the last 12 months. These choices included: (1) played a lottery ticket, scratch off, pull tab, or sweepstakes, (2) bet on a sporting event or sport pool, (3) played poker or other non-casino cards, (4) played video poker, keno, video blackjack, or arcade games, (5) went to a casino, riverboat casino, or after hours casino, and (6) bet on

horses, dogs, or cock fights. All of these gambling facilities are available in the state of Iowa.

Data Analysis

In this study, frequency analysis was implemented to present the demographic profile of the respondents, and their gambling behavior. Cross-tabulations were used to analyze the relationships between gambling status and demographic characteristics of student respondent (gender, student status, college, employment status, and grade point average). The relationships between gender and scope of gambling, frequency of gambling, and gambling expenditures also were analyzed with cross-tabulations (Babbie, 1995).

The distributions of the two continuous outcome variables (gambling frequency and expenditure) were found to be very skewed. Gambling frequency and expenditure along with gambling scope were, therefore, grouped into ordinal categories, and these categories allowed for further cross-tabulations. The relationships between parental and peer gambling and student gambling (i.e. scope, frequency, and expenditure) were analyzed with additional cross-tabulations. Given the categorical nature of several variables, gamma statistics were used to test the strength of relationship among the variables. This analysis was employed to identify the variables that would distinguish between different levels of gambling involvement (none, low, medium, high) and possible predictor variables (demographic characteristics, and gambling environment).

Gambling behavior among college students

In this study over half of the students (56%) had gambled in some form during the past year, and on average they had gambled four different times per month, and they spent an average of \$33 per month. However, 23% of the respondents gambled between 4-9 times and 14% gambled over 9 times a month. Over one third of the gamblers however spent a

larger amount on gambling; 18% spent between \$20 to \$ 60 a month, and another 18% spent over \$66 per month. The scope of gambling was measured by the number of gambling activities; 20% of the students participated in 2 different activities, whereas 19% participated 3-6 different gambling activities. This study also investigated the popularity of different type of gambling activities. The most popular gambling activity among students was - lottery, scratch off, pull tab or sweepstakes (34%). This was followed by poker and non-casino cards (28%), video-poker, keno, video blackjack and arcade games (26%), visits to casinos, river boat casinos, and after hour casinos (25%), betting on sporting events or pool (21%), and betting on horses, dogs, and cock fights (8%).

In response to a questions requesting their reasons for gambling, a large proportion of students said that gambling for them was mainly a form of entertainment (65%), but about one third (30%) gambled for “winning” and a small proportion identified other reasons such as “compulsion to gamble”, and to “meet people.” In addition to reasons for gambling, reasons for not gambling also reveal additional information about students’ view of gambling. As one may expect a majority of non-gambling students (57%) said they did not gamble because they were not interested in gambling. However, other reasons for not gambling included: can’t afford gambling (16%), not old enough (20%) , and not convenient to gamble (2%). A very small proportion (5%) indicated that they did not gamble because they opposed all types of gambling.

Gender Differences in Gambling Behavior

College students exhibited significantly different gambling behavior - frequency, scope and expenditure - by their gender. Results presented in Table 2 show that male students gamble significantly more often per month than female students ($X^2 = 20.77$, $p < .000$, $df = 3$). Similarly, it is obvious from results presented in Table 3 that male students

spent significantly more money per month on gambling than female students ($X^2 = 23.10$, $p < .000$, $df = 3$). A similar trend was also found for the scope of gambling as seen in Table 4. Male students participated in significantly more types of gambling activities than female students ($X^2 = 23.10$, $p < .000$, $df = 3$).

[Insert Table 2, 3, & 4 here]

Relationship between Parental Gambling and Student Gambling

The relationship between mother gambling expenditure and student frequency of gambling was not statistically significant. The same was true for the relationship between mother gambling expenditure and student gambling expenditure. On the other hand, the relationship between mother gambling expenditure and student scope of gambling was found to be significant ($\text{Gamma} = .22$, $p < .0001$). The positive association between the two variables suggests that as the level of mother gambling expenditure increases so does student scope of gambling. These results are presented in Table 5.

[Insert Table 5 here]

The relationship between father gambling expenditure and student gambling frequency was found to be statistically significant ($\text{Gamma} = .24$, $p < .000$). From this positive association between the two variables it can be concluded that as the level of father gambling expenditure increases so does student frequency of gambling (Table 6). Similarly, the relationship between father gambling expenditure and student gambling expenditure was also found to be positive and significant ($\text{Gamma} = .25$, $p < .000$). These results indicate that as the level of father gambling expenditure increases so does student gambling expenditure (Table 7). Additionally, the relationship between father gambling expenditure and student gambling scope was also found to be significant ($\text{Gamma} = .31$, $p < .000$), indicating once again that there is a positive association between the two variables indicating

that as the level of father gambling expenditure increases so does student scope of gambling. These results are presented in Table 8.

[Insert Table 6, 7, & 8 here]

Relationship between Peer Gambling and Student Gambling

The relationship between peer gambling expenditure and student gambling frequency was also found to be statistically significant ($\text{Gamma} = .44, p < .000$). According to these results it can be concluded that as the level of peer gambling expenditure increases so does student frequency of gambling (Table 9). In addition, the relationship between peer gambling expenditure and student gambling expenditure was found to be significant as well ($\text{Gamma} = .49, p < .000$), indicating that there is a positive association between the two variables - as the level of peer gambling expenditure increases so does student gambling expenditure (Table 10). Similarly, the relationship between peer gambling expenditure and student gambling scope was also found to be statistically significant ($\text{Gamma} = .52, p < .000$); there is a positive association between the two variables - indicating that as the level of peer gambling expenditure increases so does student scope of gambling (Table 11).

[Insert Table 9 & 10 here]

Discussion

In this study gambling behavior was defined significantly by gender of respondents. Male students were found to not only gamble more frequently, but also to spend more money gambling, and to be involved in more gambling activities than female students. These results are similar to those reported by Winters et al. (1993), Lesieur et al. (1991), and Ladouceur et al. (1994). These researchers also found male students to have higher scores on their measures of frequency, and found that males had higher scores than females on their measures of gambling expenditure (Winters et al., 1993; Lesieur et al., 1991). Hrabá and

Lee (1996) also found that male students had higher scores than female students on scope of gambling.

Social learning theory suggests that individuals learn certain behaviors by observing the behaviors of those around them (models). Which behaviors will be learned and adapted depends on who is modeling them. People are more likely to follow the example of those individuals who play a significant role in their lives. These are the people they value more than anyone else and whose actions they are more likely to copy. If social learning theory were to hold true in the case of gambling behavior, it stands to reason that students who gamble would be more likely to have parents who gamble. In addition, the greater the students level of involvement in gambling attitudes, the greater the level of their parents involvement in gambling behavior. Other studies have shown that children whose parents gamble are more likely to gamble themselves (Browne & Brown, 1993; Jacobs, 1989). Similarly researchers have also shown that there is a greater likelihood of children developing gambling problems if their parents happen to be problem gamblers (Lesieur et al., 1991; Winters et al., 1993; Govoni et al., 1996).

The current study separated gambling activities of mother and father rather than combining them into 'parent.' Results show that the relationship between father's level of gambling and student's level of gambling was significant for all three measures of student gambling--frequency, expenditure, and scope. Relationship between students' and mothers' level of gambling, however, was significant only in one measure--that is the scope of gambling. From these results it can be concluded that fathers' gambling behavior appears to be more influential on students' gambling behavior than mothers' gambling behavior.

Relationship between Peer Gambling and Student Gambling

The relationship between peer gambling and student gambling also supported the theory of social learning. Students whose best friends spent greater amounts of money on gambling than those who did not have friends who gambled were more likely to fall in the highest categories of gambling frequency, gambling expenditure, and scope of gambling activities themselves. These relationships were found to be highly significant suggesting that peer gambling is the factor with the greatest influence over college student gambling behavior. These results are consistent with the results of previous studies showing that friendships in adolescents are extremely important in determining adolescent behavior (Savin-Williams & Berndt, 1990; Browne & Brown, 1993; Hartup, 1993).

It can be concluded that results of this study provide a great deal of support for social learning theory and the notion that the social environment (parents, friends) plays an important role in the development of gambling behavior. Involvement in gambling was found to be positively related to both the gambling activities of parents and the gambling involvement of respondents' friends. It is important for students to recognize that their social environment (the friends they keep) has a great potential of influencing their involvement in gambling behavior. Gambling prevention programs must also focus on providing specific tools to help students combat these influences.

Conclusion and Implications

Gambling was not as prevalent among college students at Iowa State University as it has been in some previous studies. This study provided a great deal of support for social learning theory and the notion that the social environment plays an important role in the development of gambling behavior. Student gambling was found to be positively related to both the gambling of parents and the gambling of best friends. In fact, the gambling expenditure of best friends was the most significant predictor of all three measures of

gambling behavior. The students who gambled were doing so on a regular basis and some of them were spending a substantial amount of money. The opportunities to engage in popular gambling activities such as--lottery and non-casino cards--are also the most readily available in many parts of Iowa. That is, unfortunately, not a practical solution. The availability of these activities makes them so commonplace that it seems people sometimes do not even make the connection that they are gambling.

Primary prevention is a method used in our society to combat the spread of number of potentially dangerous behaviors. The purpose of primary prevention, then, is to intervene in the earliest stage of addiction development and hinder its progression (Gerevich & Backsskai, 1960; Gossop & Grant, 1990). It is crucial that prevention efforts take this process of social learning into account. Students should learn to recognize the sources of influences on their gambling behavior. They must also be given specific tools with which to combat these influences and make better, more well-informed decisions in regards to gambling. This study indicates that students should be subject to gambling prevention efforts at the college level if not before.

Findings of this study suggest that the content of primary prevention efforts should include the following: 1) detailed information on the negative consequences of gambling, 2) acknowledgment of the addictive nature of gambling, 3) the facts regarding the chances of winning and losing when gambling, 4) the tools for recognizing and combating the various social influences encouraging students to gamble, and 5) the availability and location of services that can help gambling-related problems.

Participants in this study indicated that help should be available for those who find themselves in trouble due to gambling. In addition, information regarding negative outcomes of gambling should be widely publicized through various sources such as

pamphlets, flyers, and public service announcements. They also suggested that students should know that they can seek advice and counsel on a confidential basis.

Future research should continue to investigate the gambling behavior of young people beyond the context of behavior that is already problematic. If primary prevention strategies are to be implemented, more information is needed about the origins of all gambling behavior and not simply the origins of pathological gambling. A representative sample of US colleges and universities would be ideal to achieve generalizability of the findings at national level. Research should also delve into the development of primary prevention of gambling programs, their implementation, and eventually the evaluation of their effectiveness.

Limitations of the study

Since the sample for this study was not randomly selected, caution should be exercised in generalizing the results of this study to all college students. It should also be noted that the ordinal categories used in analyzing the variables of student gambling frequency, expenditure, and scope, and mother, father, and peer expenditures are sample specific. This means that respondents were assigned to different categories of gambling frequency, expenditure, and scope based on the distribution of each variable, and not on the basis of any predetermined level of cutoffs. Furthermore, it should also be noted that the data on mother, father, and peer gambling (frequency, expenditure, scope) is based on respondents' perception and not actual experiences reported by the parents or friends.

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Table 1. Socio-demographic characteristics of the sample^a

Characteristic	Valid Percent ^b
<u>Gender</u>	
Male	50.9
Female	49.1
<u>Ethnicity</u>	
Caucasian	90.6
Asian	3.7
African American	2.6
Spanish Descent	1.2
Native American	.6
<u>Student status</u>	
Freshman	7.7
Sophomore	41.8
Junior	32.6
Senior	17.5
Graduate	.4
<u>Academic college</u>	
Business	29.8
Family & Consumer Science	20.5
Agriculture	14.7
Engineering	13.7
Liberal Arts & Sciences	13.4
Design	4.8
Education	3.1
<u>Employment status</u>	
Employed part-time	52.0
Student only/not employed	41.9
Employed full-time	6.1
<u>Grade point average</u>	Mean = 2.9

^aN = 797

Table 2. Gender differences in frequency of gambling^a

Frequency of Gambling	Percent of Males	Percent of Females
Non-gamblers (0 times)	37.7	49.1
Low frequency	20.3	24.7
Medium frequency	23.8	16.5
High frequency	18.3	9.8

^ap < .000

Table 3. Gender differences in gambling expenditure^a

Gambling Expenditure	Percent of Males	Percent of Females
Non-gamblers (\$0 spent)	39.3	51.4
Low expenditure	15.1	21.3
Medium expenditure	24.5	12.2
High expenditure	21.1	15.1

^ap < .000

Table 4. Gender differences in scope of gambling^a

Scope of Gambling	Percent of Males	Percent of Females
Non-gamblers (0 activities)	37.6	49.1
1 activity	15.3	21.1
2 activities	23.4	16.0
3 to 6 activities	23.7	13.8

^ap < .000

Table 5. Relationship between mother gambling expenditure and student scope of gambling^a

Student Scope	Non-gambler	Mother Gambling Expenditure		
		Low	Medium	High
Non-gambler	48.1%	34.0%	34.9%	33.3%
Low	17.9%	21.0%	18.6%	17.6%
Medium	20.4%	21.0%	14.0%	25.5%
High	13.6%	24.0%	32.6%	23.5%

^ap < .0001

Table 6. Relationship between father gambling expenditure and student frequency of gambling^a

Student Frequency	Non-gambler	Father Gambling Expenditure		
		Low	Medium	High
Non-gambler	51.2%	37.0%	32.2%	28.4%
Low	21.3%	24.0%	24.3%	25.0%
Medium	15.5%	21.0%	29.6%	28.4%
High	12.0%	18.0%	13.9%	18.2%

^ap < .000

Table 7. Relationship between father gambling expenditure and student gambling expenditure^a

Student Expenditure	Non-gambler	Father Gambling Expenditure		
		Low	Medium	High
Non-gambler	53.0%	41.1%	33.6%	29.1%
Low	18.3%	20.0%	17.3%	19.8%
Medium	13.2%	17.8%	27.3%	27.9%
High	15.5%	21.1%	21.8%	23.3%

^ap < .000

Table 8. Relationship between father gambling expenditure and student scope of gambling^a

Student Scope	Non-gambler	Father Gambling Expenditure		
		Low	Medium	High
Non-gambler	51.2	37.0	32.2	28.1
Low	18.8	19.0	19.1	15.7
Medium	19.1	25.0	17.4	22.5
High	10.9	19.0	31.3	33.7

^ap < .000

Table 9. Relationship between peer gambling expenditure and student frequency of gambling^a

Student Frequency	Non-gambler	Best Friend Gambling Expenditure		
		Low	Medium	High
Non-gambler	56.6%	22.3%	28.7%	7.9%
Low	19.0%	33.0%	21.8%	28.6%
Medium	13.7%	24.3%	31.0%	42.9%
High	10.7%	20.4%	18.4%	20.6%

^ap < .000

Table 10. Relationship between peer gambling expenditure and student gambling expenditure^a

Student Expenditure	Non-gambler	Best Friend Gambling Expenditure		
		Low	Medium	High
Non-gambler	58.9%	24.0%	29.8%	8.2%
Low	17.3%	28.1%	15.5%	16.4%
Medium	11.9%	27.1%	19.0%	41.0%
High	11.9%	20.8%	35.7%	34.4%

^ap < .000

Table 11. Relationship between peer gambling expenditure and student scope of gambling^a

Student Scope	Non-gambler	Best Friend Gambling Expenditure		
		Low	Medium	High
Non-gambler	56.6%	22.3%	28.7%	7.8%
Low	17.6%	27.2%	12.6%	17.2%
Medium	16.1%	31.1%	17.2%	32.8%
High	9.8%	19.4%	41.4%	42.2%

^ap < .000

(Relevant Research Example)

The Creative Economy in Iowa

Research and Report Prepared for the
Iowa Department of Cultural Affairs

By

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February, 2003

The Creative Economy in Iowa: An Overview

This study is an assessment of Iowa's creative economy. It represents a broad inventory of the creative composition of the Iowa economy with an eye towards defining its size and scope, measuring how it compares with the U.S., and discerning the value of the creative economy to the larger Iowa economy.

The creative economy has two important dimensions. The first is Iowa's creative workforce. The second is Iowa's creative industrial composition. The creative workforce is further segmented into two groups. The first, borrowing from Florida's work (2002), is the *super creative core*, which is composed of computer and mathematical professionals; architects and engineers; life, physical, and social scientists; education, training, and library professionals; and arts, design, entertainment, sports, and media occupations. The second subgroup is composed of the occupations termed *creative professionals*. Creative professionals include managers and administrators, business and financial professionals, legal professionals and health care practitioners, high-end sales professionals, and community and social service workers.

Creative industries are those that employ large fractions of the creative workforce, invest heavily in research and development, or create and distribute technologically sophisticated or artistic goods and services. These industries include specific kinds of manufacturing; broadcasting and communications industries; professional services; scientific and technical services and activities; membership organizations for business, labor, and other groups; all education providers; applied, performing, visual, and performing arts; commercial sports; heritage institutions; and independent artists, performers, and writers.

Iowa's creative economy has both strengths and weaknesses, especially when compared with the U.S. creative economy.

- By occupational grouping, Iowa's *super-creative core* of occupations makes up 10.8 percent of the workforce compared to 12 percent for the U.S.
 - Iowa has proportionately more creative workers in education, training, and library arts and sciences, but proportionately less in computer and mathematical specialists, architecture and engineering.
 - Iowa is proportionately close to the U.S. in life, physical, and social scientists and in its arts, design, entertainment, sports, and media workers.
- Iowa's *creative professional* composition (16.2 percent) is also slightly smaller than the U.S. (17.3 percent), which is more noticeable in its share of business and financial operations professionals and in its high end sales and related professionals.
- When combined, the Iowa creative occupational composition is 27 percent of the nonfarm workforce compared to a U.S. average of 29.2 percent.

During the 1990s, Iowa and the U.S. posted strong gains in creative employment growth.

- Iowa's *super creative core* occupations grew by 33 percent compared to just under 32 percent for the U.S.
 - Iowa grew faster than the U.S. in mathematics and computer careers; life, physical, and social scientists; and artists.
 - Iowa grew more slowly than the U.S. in education, training, and library professionals.
 - Iowa and the U.S. posted low or negative growth in the number of engineers and architects.
- Iowa's *creative professional* occupations grew by almost 45 percent compared to just under 25 percent for the U.S.

- Most of these gains were made in managerial and financial occupations, which grew by more than twice the rate of the U.S.
 - Legal and health related jobs grew more slowly than the U.S.
- In all, Iowa's creative occupations grew by 40 percent between 1990 and 2000 compared to 27.3 percent for the U.S.
- According to 2000 census respondents, the rate of increase in Iowans working in creative occupations was 3.5 times greater than all other occupations considering all change in occupations since 1990.

There are distinct gender differences in the composition of Iowa's creative workforce.

- Women were about 54 percent of the *super creative core* group in 2000.
 - Men were disproportionately dominant in math and computer fields, engineers and architects, and in life, physical, and the social scientists.
 - Women were much more prominent in education, accounting for 72 percent of the occupations. Prominence in this category weights the total for the super-creative core group slightly in favor of women.
- There are more male *creative professionals* than female.
 - In managerial and financial and in legal professions, there are significantly more men.
 - Women, however, make up 78.5 percent of occupations in the health care group.
- When we look at growth over the last decade, we find that women have made proportionately strong gains in the *super-creative core* professions by gaining nearly 2 of every three jobs.
 - In math and computer fields, two new jobs went to men for every one that a women got.
 - But in the education, training, and library professions, women accounted for 94.2 percent of the new jobs, and in the arts, they captured 62 percent.
- Men received the lion's share of new *creative professional* jobs.
 - Over 70 percent of new managerial and financial jobs went to men.
 - Women posted very strong gains in legal (94 percent) and health care jobs (84 percent), but these gains were not enough to offset the numerical gains men made in managerial and finance careers.
- Despite gains in many categories, 53 percent of *all creative* jobs went to men and 47 percent to women.

On an annualized basis, Iowa's creative professionals earn less than their national counterparts.

- The average for all *super creative core* workers is 82.7 percent of the U.S. average.
 - The highest percentage, 88.3 percent, was found for mathematical and computer workers.
 - The lowest percentage, 71.7 percent, was found for Iowa's arts, design, entertainment, sports, and media professionals.
- The average for all *creative professionals* was 83.7 percent of the U.S. amount.
 - Community and social service professionals had the highest value at 86.3 percent.
 - High end sales and related occupations fared more poorly at 80.3 percent.

When we switch our focus to Iowa's *creative industries*, some interesting comparisons with the U.S. emerge

- Iowa's creative industries make up 22.5 percent of all nonfarm jobs compared to 25.6 percent for the U.S.

- Iowa is proportionately very under-represented in creative manufacturing, broadcast and media firms, scientific and technical firms, applied and performing arts, and in jobs in heritage establishments.
- Iowa is proportionately competitive with the U.S. in post-secondary education, all other education, in the literary and visual arts, and in commercial sports.
- During the decade of the 1990s, jobs in Iowa's creative industries grew by 14 percent, ten percentage points less than the U.S. rate.
 - The state had relatively high growth rates in professional services firms (43 percent), performing arts (49 percent), visual arts (35 percent), commercial sports (39 percent).
 - Rates of growth were low or negative in creative manufacturing, broadcast and media firms, literary arts, and membership organizations.
- Average earnings per job in Iowa's creative industries were 73.4 percent of the U.S. average
 - Iowa's post-secondary education jobs paid slightly above the U.S. average. All other industry groupings were substantially less.
 - Among the lowest paying industries were commercial sports (25 percent), performing arts (29.5 percent), broadcast and media jobs (53 percent), scientific and technical jobs (63 percent), and applied arts (64 percent).

The study also finds rural and urban differences in the accumulation of creative jobs in Iowa.

- Nonmetropolitan areas were able to capture nearly 33 percent of all jobs in creative industries between 1990 and 2000.
 - They, however, post substantially smaller shares of the gains in scientific and technical jobs (17.5 percent) and arts and entertainment jobs (6.8 percent).
 - The study concludes that there are concentrations of creative job change in the state that align with the state's more populated regions.

Economic impact estimates were estimated for Iowa's creative workers and Iowa's creative firms.

- In all, Iowa's creative workforce converts \$8.57 billion of its take home compensation into spending in the Iowa economy, which in and of itself supports 45,812 jobs.
- After all of this household spending multiplies its way through the Iowa economy, Iowa's creative workforce sustains \$13.1 billion state sales, creates \$8.002 billion in value added, and pays \$4.7 billion in labor income to 195,464 job holders.
- Iowa's creative industries directly generate \$18.1 billion in industrial output, create \$12.1 billion in value added, and require 305,972 job holders receiving \$10.95 billion in labor income.
- When compared to all other jobs in the economy, jobs in creative industries pay 60 percent higher earnings per worker.
- It is inappropriate to add creative industry economic impact values together as many firms purchase from each other, however, the major industries that stand out are
 - Search and navigation equipment manufacturing creating \$2.9 billion in total industrial output, 22,724 jobs, and \$868 million in labor income
 - Total economic effects of newspaper publishing was \$828.8 million in output, 10,833 jobs, and \$292 million in labor income.
 - Iowa's hospitals accounted for \$6.22 billion in total industrial output, required 96,188 jobs, and paid \$2.8 billion in wages.
 - Doctors and dentists created \$5.1 billion in total, multiplied through output, 61,059 jobs, and \$2.3 billion in labor income.
 - All other education (primary and secondary) linked to \$5.26 billion in total statewide industrial output, 107,156 jobs, and \$3.8 billion in labor income.

- Post-secondary education created \$3.3 billion in total output, 60,192 jobs, and \$2.94 billion in labor income.

How does this research inform policy makers? There are serious efforts currently underway in Iowa to promote the retention of specific kinds of creative workers, to entice professionals to consider the state, and to attract the kinds of firms that provide employment opportunities for a talented and industrious workforce that will help Iowa rise above current rates of economic change. Strong arguments have been made that Iowa's creative occupational structure needs more attention from state leaders than it perhaps has received in the past.

An honest summary of this research would conclude that Iowa has a ways to go if it is to achieve creative economy competitiveness with much of the rest of the nation. This research represents the statistical baseline from which planners and policy makers can proceed in promoting the state and its human resources. Politically and professionally there is now an obvious open-mindedness regarding what is needed to stimulate economic and social growth. It is equally obvious that the state has tremendous assets to use in cultivating its creative economy. It has nationally ranked universities that are powerful magnets for talent. It has major cities that are highly livable places with exciting and diverse economies, social structures, and entertainment options. It has rural spaces that are diverse and interesting, offering hosts of recreation and entertainment opportunities.

Comparatively few places in Iowa will likely realize the majority of economic and social growth over the next decade. Still, the overall livability in those places and the rest of the state depends on far more than merely the number of jobs they create. There is great opportunity for growth and enhancement in non-traditional areas of Iowa's economy – its artistic, cultural, and recreational institutions. These opportunities can only be enhanced when state and community leaders recognize that the sum of a community is greater than the sum of its jobs.

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(Relevant Research Example)

**Epidemiology and Genetics of Parkinson's Disease
Control Recruitment for the Mayo Clinic**

Revised Final Methodology Report

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Center for Survey Statistics & Methodology (CSSM), Iowa State University
September 11, 2003

1. Introduction

Center for Survey Statistics and Methodology (formerly known as the Iowa State University Statistical Laboratory, Survey Section) was contacted by the Mayo Clinic to recruit controls for a case-control study on Parkinson's disease in the upper Midwest of the US. This report documents the sampling procedures used to design the recruitment effort, the data collection procedures implemented, and the results obtained during the recruitment process.

2. Design of Randomized Recruiting Protocol

The Mayo Clinic was interested in finding controls for cases located in a 5-state area composed of Minnesota, Wisconsin, Iowa, and North and South Dakota, using a fully-randomized contact method. Random-digit dialing (RDD) was selected as the method of contact for this study.

The 5-state area was divided into five "regions" to be considered in the study: a 120-mile region around the Mayo Clinic, the remainder of Iowa, the remainder of Wisconsin, the remainder of Minnesota, and all of North and South Dakota. The Mayo Clinic provided CSSM with projections of the numbers of controls needed in each of these regions, broken down by gender and by 5-year age category.

In an effort to make estimates of the number of household contacts needed for on-going case-control studies, CSSM devised a procedure based on demographic information provided by the US Census Bureau, summarized as follows. For each region, we compare the prevalence frequency of the matching categories in the US adult population with the frequency of the matching categories for the desired controls. This results in ratios showing the relative "rarity" of controls in each of the age/gender categories in each region. These ratios were adjusted by a age/gender-dependent "screening effect" provided by the Mayo Clinic, which was used to adjust for the fact that a fraction of the population was expected to be found ineligible because they display some characteristics of people with Parkinson's disease. The screening adjustment was important, since the prevalence of Parkinson's disease symptoms among the general population increases sharply with age.

The matching category that is the most "rare" in a region, in the sense of having the highest screening-adjusted controls-to-population prevalence ratio, determines the expected number of household contacts required in that region, since that is the category that is expected to require the most household contacts to complete. The expected number of household contacts is then calculated as the total number of controls required for the region multiplied by the screening-adjusted ratio of the prevalence frequencies for the rarest category. It should also be noted that this procedure is likely to result in the identification of many superfluous controls in matching categories other than the rarest one. However, in order to fill the "rarest" category using a procedure that targets the overall population using a randomized method such as RDD, this is unavoidable.

The approach described here is further explained using an example in the Appendix.

3. Data Collection Procedures

Telephone interviewers were trained in appropriate techniques for carrying out the random digit dialing (RDD) screening interviews needed to identify potential study controls for each of the five designated study regions. The RDD screening interviews were conducted using computer-assisted telephone interviewing (CATI) Blaise software. A manual of interviewing procedures and question-by-question specifications was used for training and as a reference throughout the interviewing process. The data collection was conducted from May 1, 2002 through August 10, 2002.

When conducting RDD screenings, the following protocols were followed by CSSM staff. All phone numbers in the sample were rotated through a minimum of 12 call attempts. Phone numbers associated with businesses (this includes fax lines), group quarters, teen-lines, or vacation homes were classified as non-households. The remaining working numbers were considered potential households and were screened for the specific characteristics required by the study to identify all eligible respondents within that household.

Phone numbers that required multiple attempts were tried at various times (e.g., days and evenings, weekdays and weekends). Numbers were classified as ring-no-answer if no one was reached after these attempts. If an answering machine was reached, additional attempts were made to that number to try to screen the household. Suspected fax lines and modems were attempted at several additional and varied times to determine if they were actually a household number.

All interviews were conducted under the direct supervision of a telephone interviewing supervisor. Interviewers were monitored at random intervals as a quality control measure, and collected data were edited by supervisory staff. Discrepancies, omissions and unclear responses were clarified with the interviewer if possible. CATI software was programmed to screen households and select controls, and included edit checks to detect illegal values and logic errors as responses were entered into the computer during the screening interview. A data retrieval callback was made to the respondent by the original interviewer or supervisor when required.

4. Final Outcomes

Table 1 shows the results of potential respondents located by region. This table includes only eligible respondents who, when screened, agreed to be contacted for the next phase of the study.

Table 1: Potential Respondents Located by Region

		Males					Total
		43-47	48-52	53-57	58-62	63-67	
Rochester Radius		64	64	55	41	36	260
Iowa		29	29	27	12	14	111
Minnesota		9	8	11	7	7	42
Wisconsin		7	12	7	4	4	34
N/S Dakota		28	20	16	16	9	89
Total		137	133	116	80	70	536

		Females					Total
		43-47	48-52	53-57	58-62	63-67	
Rochester Radius		89	81	81	50	41	342
Iowa		37	37	20	14	9	117
Minnesota		13	14	16	14	11	68
Wisconsin		16	14	10	8	7	55
N/S Dakota		34	24	19	14	15	106
Total		189	170	146	100	83	688

Table 2 shows the final disposition results by region for all attempted telephone numbers. The dispositions for RDD sample numbers are classified into four general categories, which include households-screened, households-not screened, unknown eligibility, and non-households.

Table 2: Final Disposition by Region

	Region					Totals
	Rochester Area	Iowa	Minnesota	Wisconsin	North and South Dakota	
Household Screening Interviews Completed						
Not Eligible-Age	1319	531	247	188	403	2688
Not Eligible-Health	22	17	6	5	15	65
Eligible-Agreed	457	168	86	67	144	922
Eligible-Refused	112	35	24	15	32	218
	1910	751	363	275	594	3893
Household Non-Response						
Maximum Attempts Answering Machine	58	20	14	7	14	113
Maximum Attempts Mixed Response	147	53	18	30	41	289
Hard of Hearing/Language Problem	40	15	2	6	4	67
*Household Contact, Screening Incomplete	61	30	9	11	16	127
Household Refused to screen	532	209	104	114	161	1120
	838	327	147	168	236	1716
Eligibility Unknown						
Maximum Attempts Ring-No-Answer	188	61	29	34	44	356
Non-Household						
Not in Service	950	351	161	94	351	1907
Business	384	155	47	65	131	782
Other non-residence	38	15	21	12	19	105
Fax	173	54	23	19	39	308
	1545	575	252	190	540	3102
Totals	4481	1714	791	667	1414	9067

*This category includes one case with a disposition of “Screen A” Completed / Maximum Calls

Some households included more than one individual in the desired age range. Table 2a shows the final disposition of individual respondents who completed the screening process by region. These individuals were between the ages of 43 and 67, but some were not eligible for the study due to health reasons and some were eligible but refused to participate. Others were eligible and agreed to participate.

Table 2a: Individual Respondent Dispositions by Region

	Region					Totals
	Rochester Area	Iowa	Minnesota	Wisconsin	North and South Dakota	
Respondents with Screening Interviews Completed						
Not Eligible-Health	43	25	12	13	18	111
Eligibility Unknown	0	1	0	0	1	2
Eligible-Agreed	602	228	110	89	195	1224
Eligible-Refused	150	57	37	18	51	313
Totals	795	311	159	120	265	1650

Table 3 demonstrates the response, cooperation, and contact rates for each region and all regions combined. Calculations are based on the standard definitions for survey outcome rates established by The American Association for Public Opinion Research (AAPOR). The response rates are based on the number of completed interviews (in this case the number of completed screening interviews), with reporting units being divided by the number of eligible reporting units in the sample. Adjusted response rates were calculated to reflect a refusal outcome for screened eligible cases. The cooperation rate is the proportion of all cases interviewed of all eligible units ever contacted, and the contact rate is the proportion of all cases in which some responsible housing unit member was reached.

Table 3. Response, Cooperation and Contact Rates

	Response Rate	Adjusted Response Rate	Cooperation Rate	Contact Rate
	%	%	%	%
Rochester Area	65.0	61.2	75.1	86.6
Iowa	65.9	62.8	74.7	88.2
Minnesota	67.3	62.8	75.9	88.6
Wisconsin	57.6	54.5	67.7	85.1
North/South Dakota	67.9	64.3	76.7	88.6
Combined Regions	65.2	61.6	74.8	87.3

Appendix: Illustration of the Prevalence Ratio Calculations.

As an example of the method used to determine the number of households to be contacted in a region, we consider the 120-mile radius region surrounding the Mayo Clinic. Controls should consist of males and females between the ages of 43 and 67, matching the cases on five-year age intervals. The Mayo Clinic provided the CSSM with the information contained in Table 1, shown below, describing the number of controls needed in each age/gender category

Table 1. 120-mile region cases

	43-47	48-52	53-57	58-62	63-67	Total
Females	6	6	0	14	14	40
Males	8	16	22	44	36	126
Total	14	22	22	58	50	166

This table was converted into percents, to show the percentage of the controls that were needed in each category, as shown in Table 2, below.

Table 2. 120-mile region cases (%)

	43-47	48-52	53-57	58-62	63-67	Total
Females	3.61%	3.61%	0.00%	8.43%	8.43%	24.10%
Males	4.82%	9.64%	13.25%	26.51%	21.69%	75.90%
Total	8.43%	13.25%	13.25%	34.94%	30.12%	100.00%

Using data from the US Census Bureau, we were able to determine the number of people in the corresponding region that fell into each age/gender category. This information is shown in Table 3, below. Note that the “All Others” category includes only people who are 18 years or older.

Table 3. Census Data for 120-mile region

	43-47	48-52	53-57	58-62	63-67	All Others	Total
Females	185598	159357	125224	97381	79372	1172737	1819669
Males	187698	159602	123681	93798	72044	1092090	1728913
Total	373296	318959	248905	191179	151416	2264827	3548582

This table was also converted into percents, shown in Table 4 below.

Table 4. Census Data for 120-mile region

	43-47	48-52	53-57	58-62	63-67	Others
Females	5.23%	4.49%	3.53%	2.74%	2.24%	33.05%
Males	5.29%	4.50%	3.49%	2.64%	2.03%	30.78%
Total	10.52%	8.99%	7.01%	5.39%	4.27%	63.82%

These Census numbers were adjusted using the screening effects. Mayo Clinic provided the age/gender-specific screen-out percentages shown in Table 5.

Table 5: Parkinson's Disease Screening Positive Rate

	43-47	48-52	53-57	58-62	63-67
Females	2.76%	9.04%	10.30%	12.93%	7.89%
Males	3.76%	3.18%	6.03%	16.22%	9.52%
Combined	3.27%	6.29%	8.54%	14.34%	8.56%

Since these rates vary by gender and age, they will affect the relative “rarity” of the controls relative to the cases. Hence, this adjustment is required to estimate the number of controls needed. Table 6 shows the adjusted relative rates in the overall population.

Table 6: Census Data for 120-mile region considering Parkinson's screening data

	43-47	48-52	53-57	58-62	63-67	Total
Females	5.09%	4.08%	3.17%	2.39%	2.06%	16.79%
Males	5.09%	4.35%	3.28%	2.21%	1.84%	16.77%
Total	10.18%	8.42%	6.42%	4.61%	3.90%	33.53%

Finally, the percentage of controls needed in each category was then compared with the screening-adjusted percentage of people in the region in each category by dividing the cells in Table 2 by the cells in Table 6. This is shown below in Table 7.

Table 7: Comparison Table (Cases/Census)

	43-47	48-52	53-57	58-62	63-67
Females	0.710689	0.884864	0	3.529653	4.093556
Males	0.94672	2.213417	4.046478	11.96921	11.80589

This table represents the difficulty of finding a control in a given category, considering the prevalence of people in that category for the corresponding region. Looking at this table, the hardest to find category seems to be males ages 58-62. Therefore, in order to be able to reach all of the males needed in this age group, the overall number of controls needed (166) should be multiplied by 11.97. This means that in order to reach all of the controls for this study, an estimated 1,987 households needed to be reached.

Tables 7 through 12 depict the number of individual respondents by gender and age for each region. These respondents completed the screening process, were eligible, and agreed to participate. Some households included more than one eligible respondent who agreed to participate.

Table 8: Respondents by Gender and Age, Rochester Area

	43-47	48-52	53-57	58-62	63-67	Total
Females	89	81	81	50	41	342
Males	64	64	55	41	36	260
Total	153	145	136	91	77	602

Table 9: Respondents by Gender and Age, Iowa

	43-47	48-52	53-57	58-62	63-67	Total
Females	37	37	20	14	9	117
Males	29	29	27	12	14	111
Total	66	66	47	26	23	228

Table 10: Respondents by Gender and Age, Minnesota

	43-47	48-52	53-57	58-62	63-67	Total
Females	13	14	16	14	11	68
Males	9	8	11	7	7	42
Total	22	22	27	21	18	110

Table 11: Respondents by Gender and Age, Wisconsin

	43-47	48-52	53-57	58-62	63-67	Total
Females	16	14	10	8	7	55
Males	7	12	7	4	4	34
Total	23	26	17	12	11	89

Table 12: Respondents by Gender and Age, North and South Dakota

	43-47	48-52	53-57	58-62	63-67	Total
Females	34	24	19	14	15	106
Males	28	20	16	16	9	89
Total	62	44	35	30	24	195

Table 13 below contains the number of individual respondents by gender and age for all regions combined.

Table 13: Respondents by Gender and Age, All Regions

	43-47	48-52	53-57	58-62	63-67	Total
Females	189	170	146	100	83	688
Males	137	133	116	80	70	536
Total	326	303	262	180	153	1224